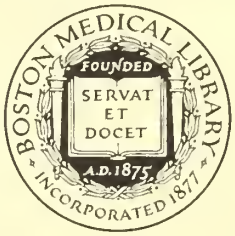
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X-Ray Film of the Month

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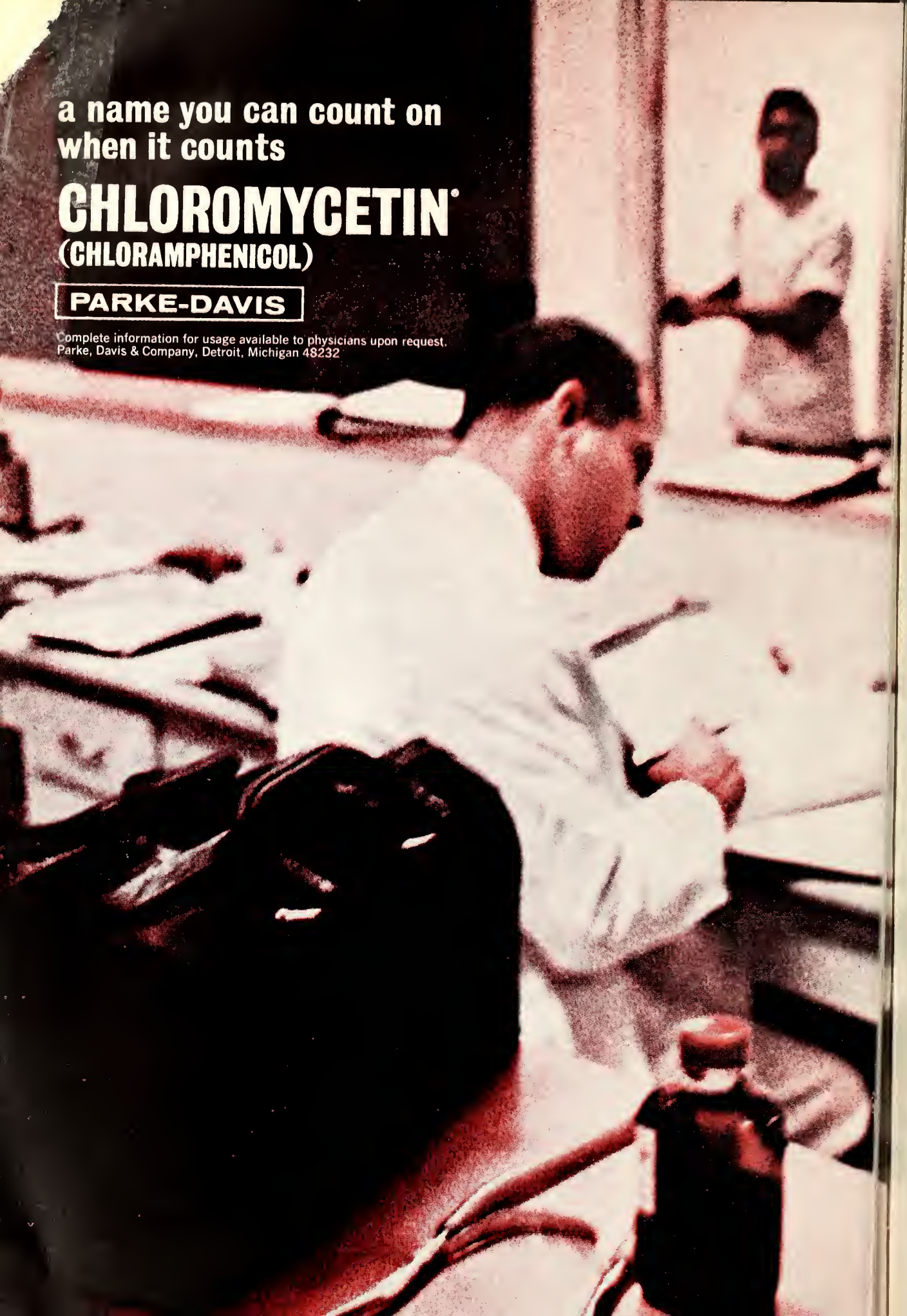
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The views expressed in this publication are those of the writers and do not necessarily reflect the opinions of the South Carolina Medical Association.

Contributions of Original Articles

Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

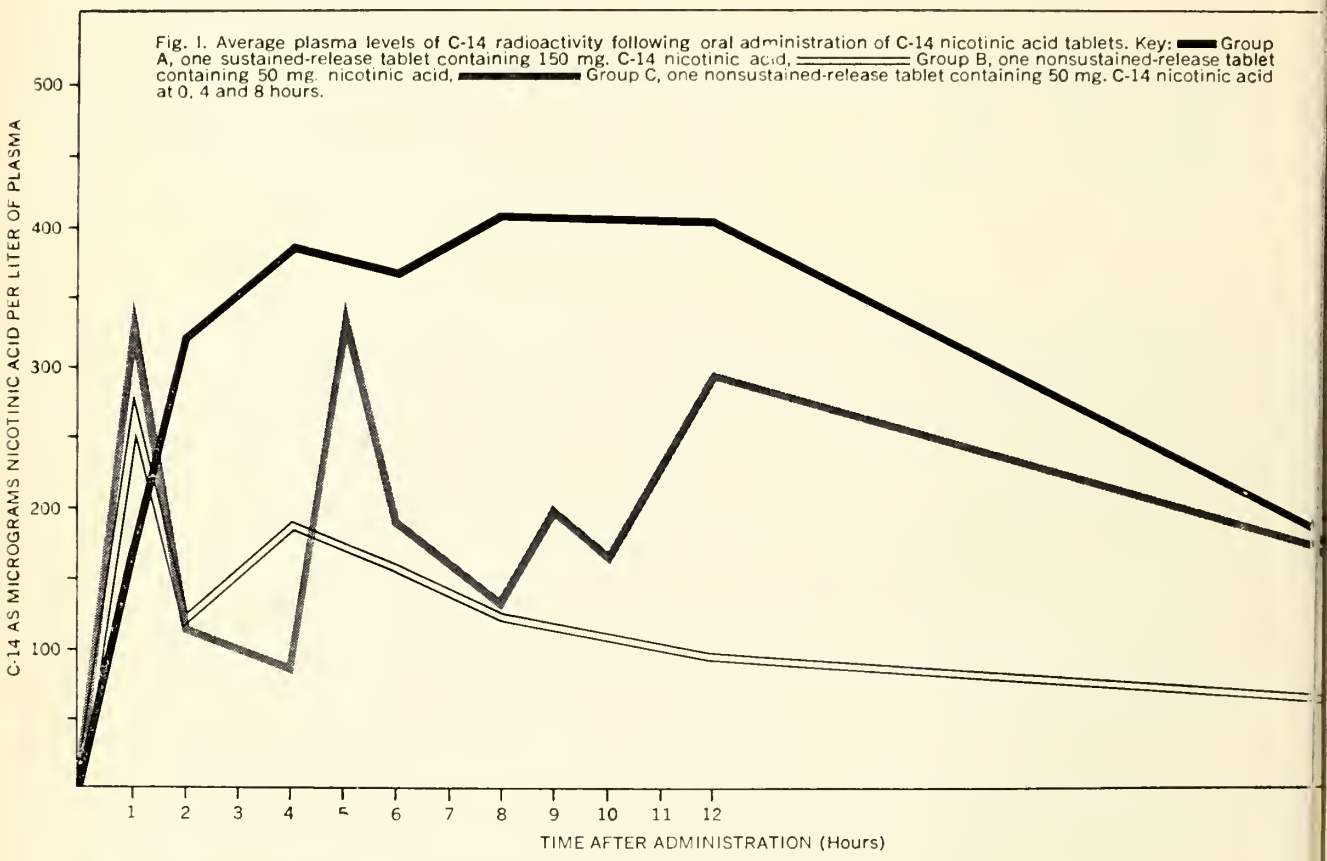
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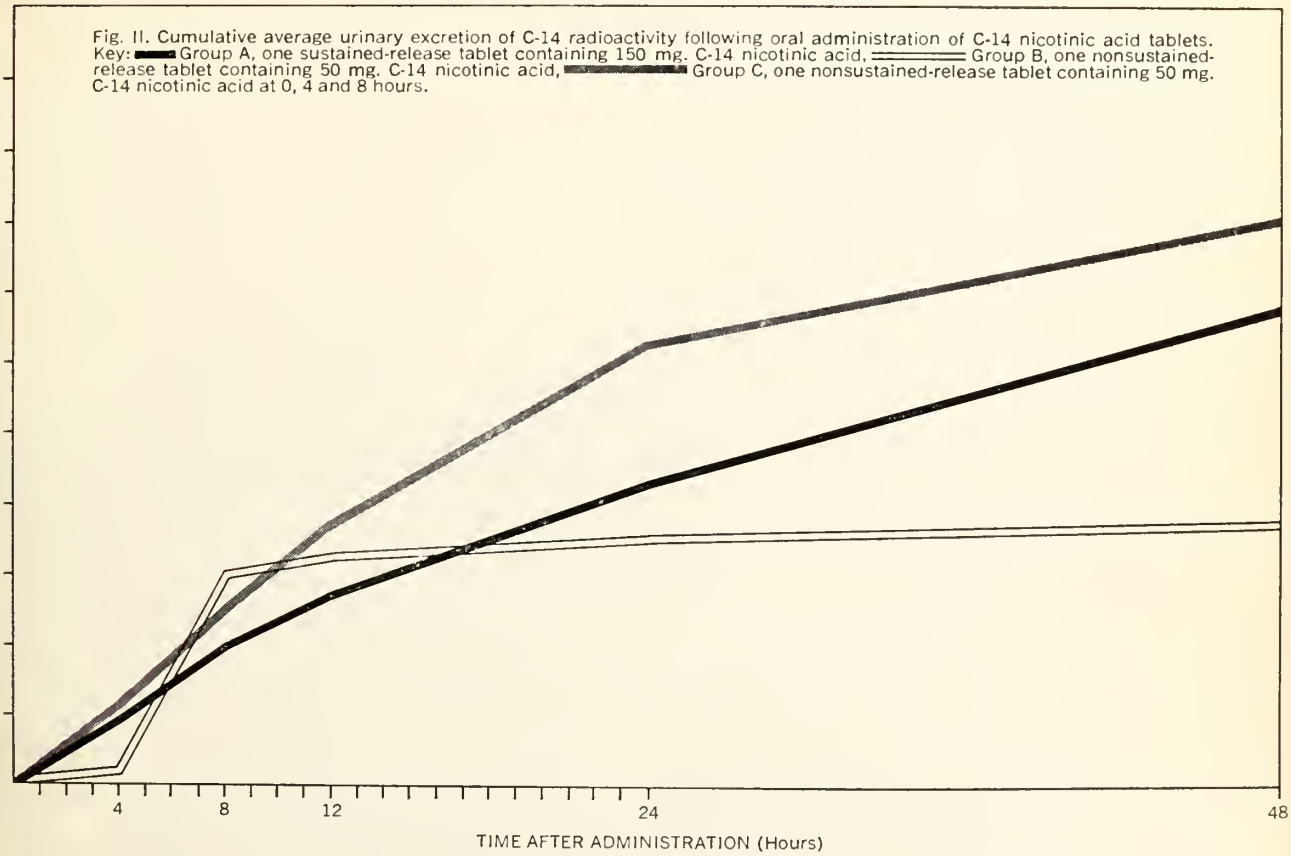


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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cause of the possibility of pı
sion of renal damage, perioc
determination of the BUN is
cated. Discontinue if the BU
or liver dysfunction is aggra
Hepatic coma may be preci
Electrolyte imbalance, sodi
or potassium depletion may
If potassium depletion shou
cur during therapy, Hygroto
be discontinued and potass
supplements given, provide



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a.
special care in cirrhosis or
re ischemic heart disease and
atients receiving corticoste-
s, ACTH, or digitalis. Salt re-
tion is not recommended.
erse Reactions: Nausea, gastric
tion, vomiting, anorexia, con-
ation and cramping, dizziness,
kness, restlessness, hyperglyc-
ia, hyperuricemia, headache,
cle cramps, orthostatic hypo-
tension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.
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in moderate hypertension and
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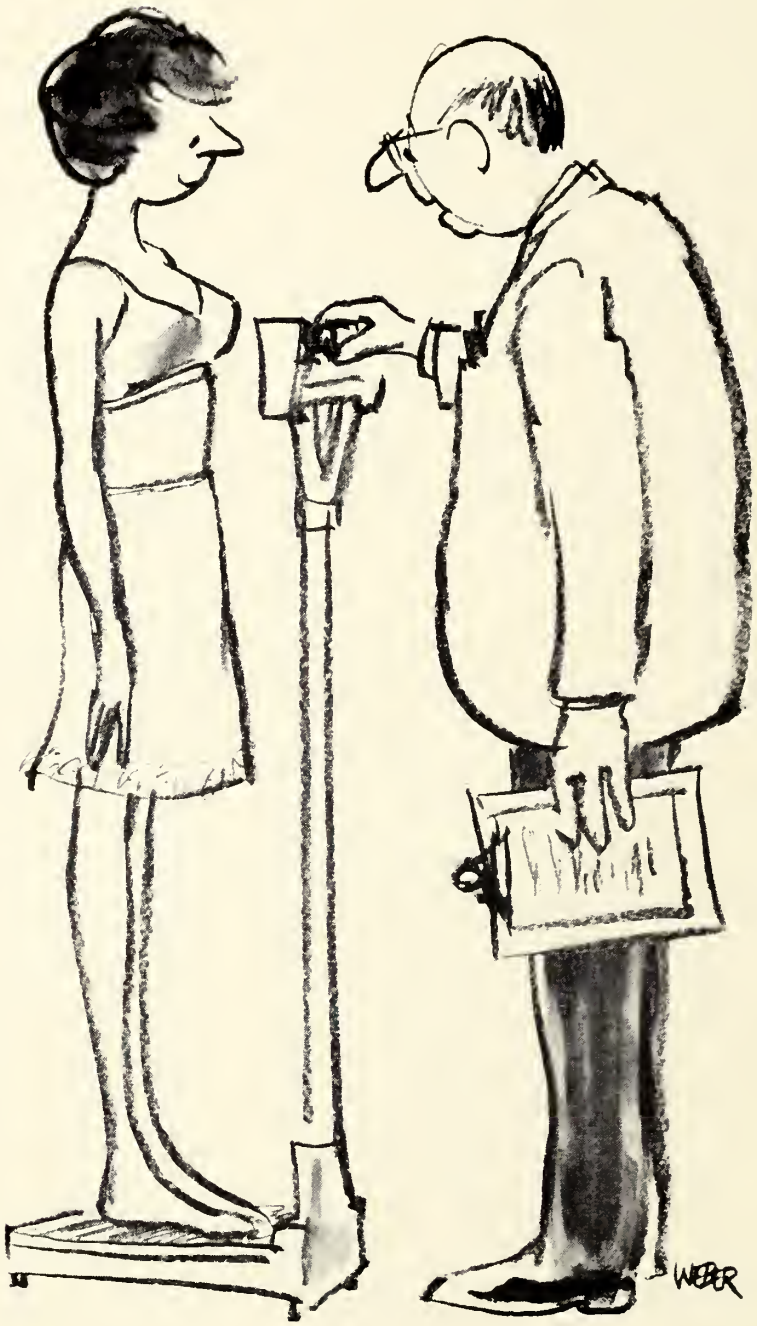
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Precautions: Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-B
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Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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Before prescribing, please consult complete product information, a summary of which follows:

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Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—*Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See *Precautions.*)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

Roche Laboratories, Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

References: **1.** Selesnick, S. T., and Clemens, T. L.: From research film "Motion Picture Films in Psychosomatic Research," available from Roche Laboratories. **2.** Clemens, T. L., and Selesnick, S. T.: *Dis. Nerv. System,* *28*:98, 1967.

VALIUM® (diazepam) Roche®

useful for somatic symptoms of psychic tension

DORSEY "FLU-GRAM"

DON'T BE LULLED BY RELATIVE LACK OF FLU LAST WINTER. THIS WINTER BE PREPARED: WHEN THE COMPLAINTS ARE COUGH AND CONGESTION, YOU CAN RELIEVE THESE SYMPTOMS WITH TUSSAGESIC TABLETS. ONE TIMED-RELEASE TABLET AT MORNING, MIDAFTERNOON AND BEDTIME BRINGS UP TO 24 HOURS' RELIEF FROM TROUBLESOME COUGH AND STUFFED AND RUNNY NOSE. TUSSAGESIC IS THE FAMOUS TRIAMINIC FORMULA, PLUS THREE OTHER PROVED CONSTITUENTS. MAKES PATIENTS MORE COMFORTABLE. FAST. ASK YOUR DORSEY REPRESENTATIVE FOR SUPPLY OF STARTER SAMPLES, OR IF FLU IS ALREADY EPIDEMIC, PHONE COLLECT. SEE BELOW.

each

Tussagesic®

timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES
a division of The Wander Company
Lincoln, Nebraska 68501

clip and file under "flu"

For relief of "flu-like" symptoms
Tussagesic timed-release tablets

PHONE COLLECT

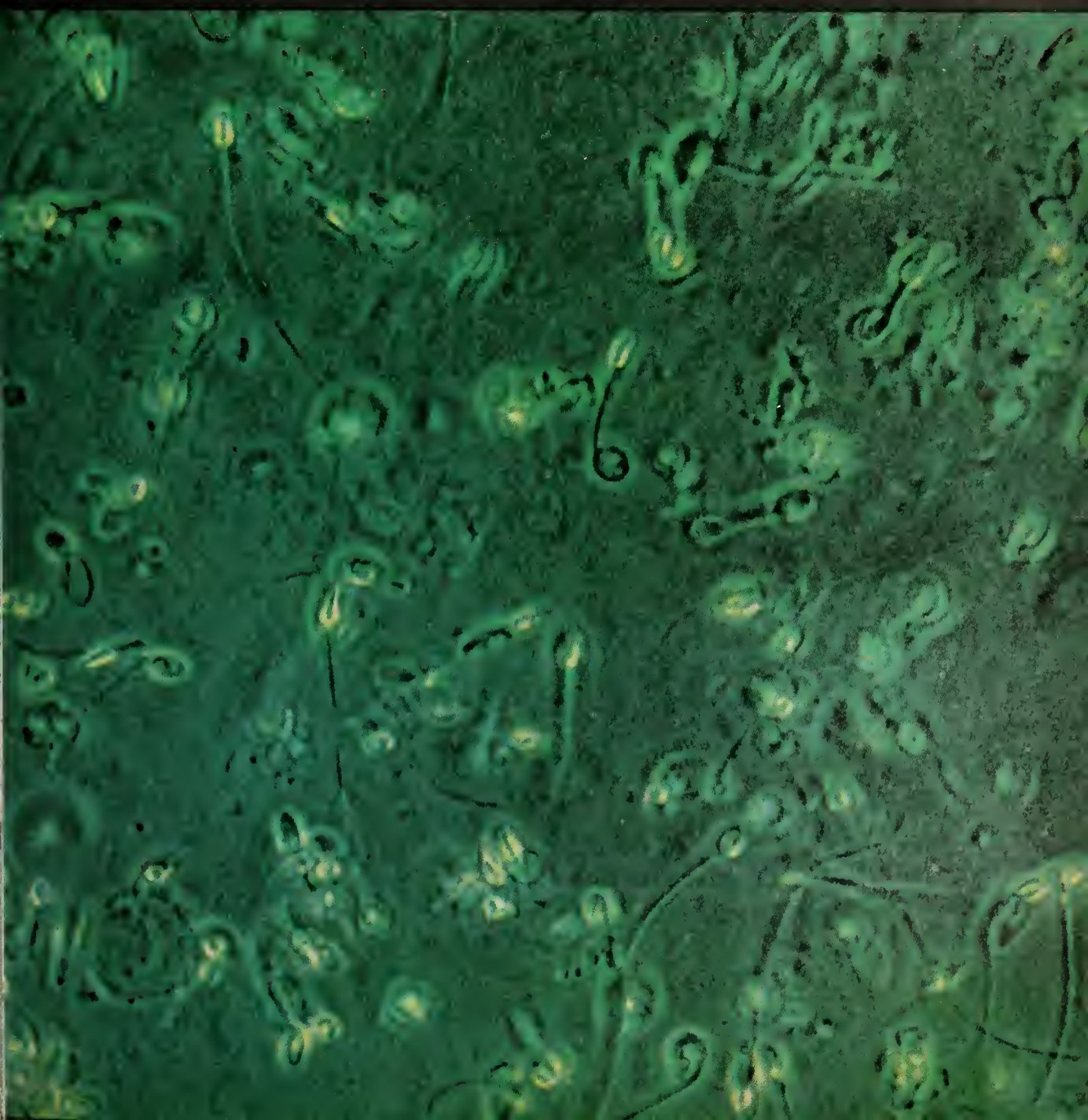
For emergency starter samples
to Keith Sehnert, M.D.
Medical Director
(402) 434-6311

Fast delivery by your Dorsey
Representative

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg ē mestranol 0.05mg)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Prescribing Information

Contraindications: Patients with any symptoms or history of thrombophlebitis, pulmonary embolism, liver dysfunction or disease, carcinoma of breast or genital organs, or undiagnosed vaginal bleeding.

Warnings: Discontinue medication pending examination if there is sudden partial or complete loss of vision, proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. The safety of Norinyl-1 in pregnancy has not been demonstrated. If a patient misses two consecutive periods, pregnancy should be ruled out before continuing the medication. If she has not adhered to the prescribed schedule, pregnancy should be considered at the first missed period. Active ingredients of oral contraceptives have been detected in the milk of mothers who received these drugs; the significance to infants has not been determined.

Precautions: Pretreatment physical should include examination of the breasts and pelvic organs, as well as a Papanicolaou smear. If endocrine or liver function tests are abnormal during therapy, repeat tests are recommended after the drug has been withdrawn for two months. Following administration of drug, preexisting uterine fibromyomata may increase in size. Careful observation and caution are required for patients with symptoms or history of epilepsy, migraine, asthma, cardiac or renal dysfunction, cerebrovascular accident, psychic depression, and diabetes. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. Possible long-term effects of the drug on pituitary, ovarian, adrenal, hepatic or uterine function must await further studies. The physician should be alert to the earliest manifestations of thrombophlebitis and pulmonary embolism. The drug should be used judiciously in those young patients in whom bone growth is not complete. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask symptoms of the climacteric. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression. Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation posttreatment, premenstruallike syndrome, changes in libido, changes in appetite, cystitislike syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, and itching. The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has neither been established nor disproved): thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory tests may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

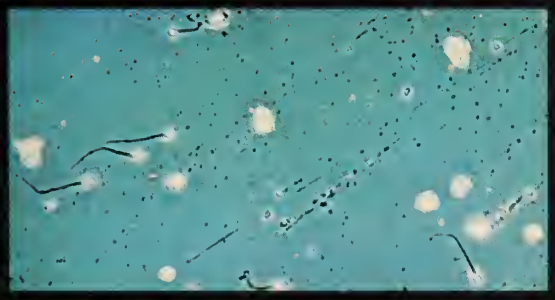
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

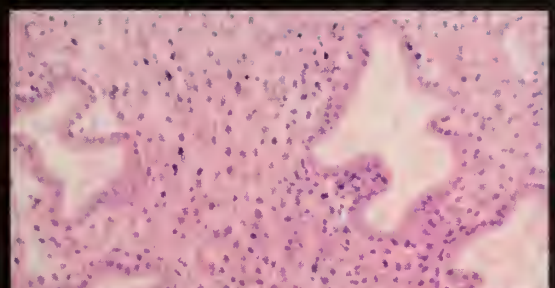
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

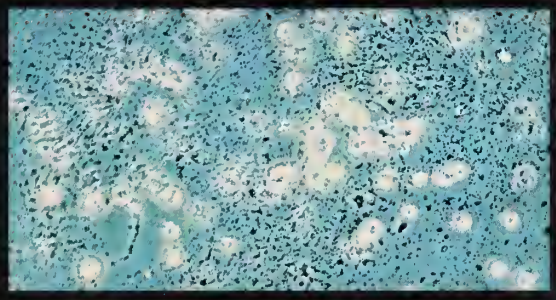


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

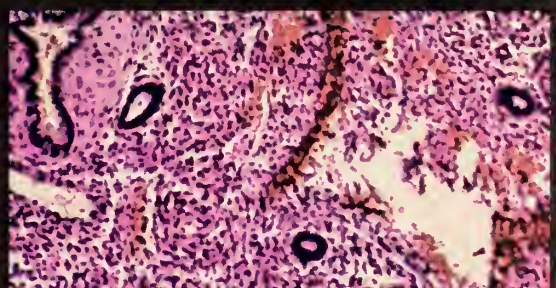
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets
(norethindrone 1mg. & mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar®
fluocinolone acetonide





Turn page for contraindications, precautions and side effects

For everyday topical steroid therapy

Synalar® 0.01%

fluocinolone acetonide provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

fluocinolone acetonide — an original steroid from

SYNTEX

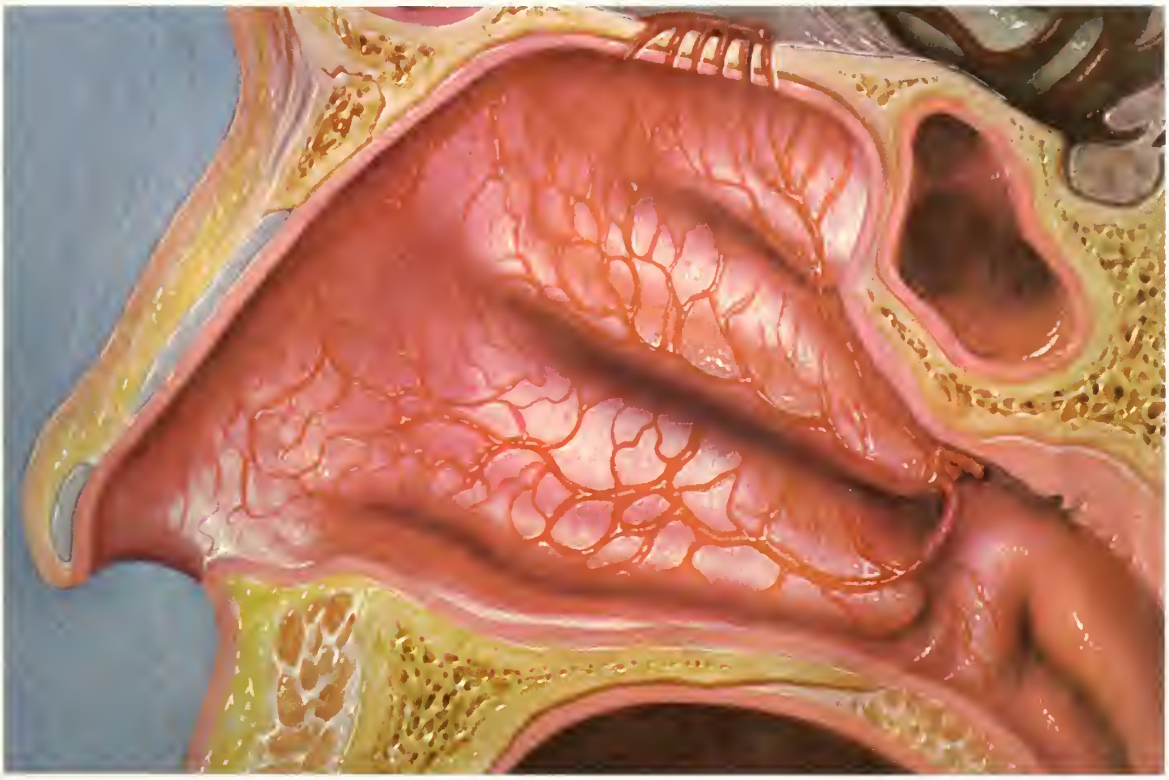
LABORATORIES INC., PALO ALTO, CALIF.



winter 1968

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska 68501. Address communications to Keith W. Sehnert, M.D., Medical Director.





this issue: the cold in pregnancy...

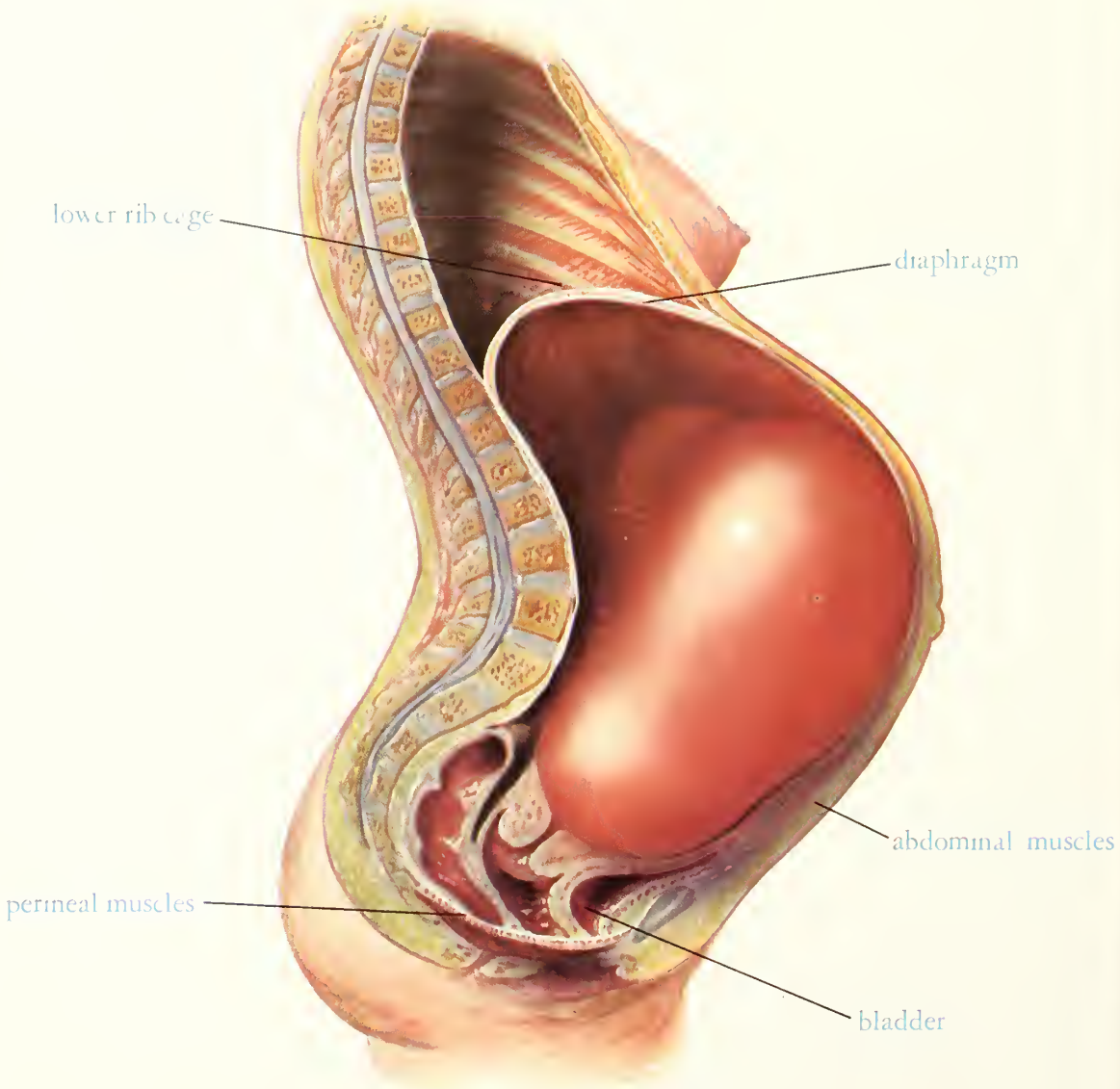
the cold in pregnancy

Frederick W. Goodrich, Jr., M.D.
Senior Obstetrician and Gynecologist, Lawrence and Memorial Hospital, New London, Connecticut

Since pregnancy and the common cold are both ubiquitous, it is not surprising that they often occur at the same time in the same patient. Incidence figures are hard to come by, but the chances are very good that any given pregnant woman will have a cold at some time during the nine months of her gestation. When she does, she will tell you that it is the worst cold she ever had. It seems to last longer and the symptoms are more distressing than they are in the non-pregnant.

For purposes of this discussion, the common cold is considered to be the well-known symptom complex which includes sore throat, stuffy nose, and a cough. Febrile states or extension of the disease process into the lower respiratory tree are not part of the common cold and will not be included in this discussion.

The clinical picture of a cold in pregnancy can be confused by a long-known physiological phenome



non. Kiesselbach's area in the nose (on the anterior part of the nasal septum above the intermaxillary bone) becomes engorged, apparently due to hyperemia induced by the increased estrogen level which accompanies pregnancy. The amount of congestion can vary in degree from woman to woman. Some have very little congestion, others will have occasional nosebleeds from this area, still others will have symptomatic congestion to the degree that they will complain of having a "chronic" or constant cold.

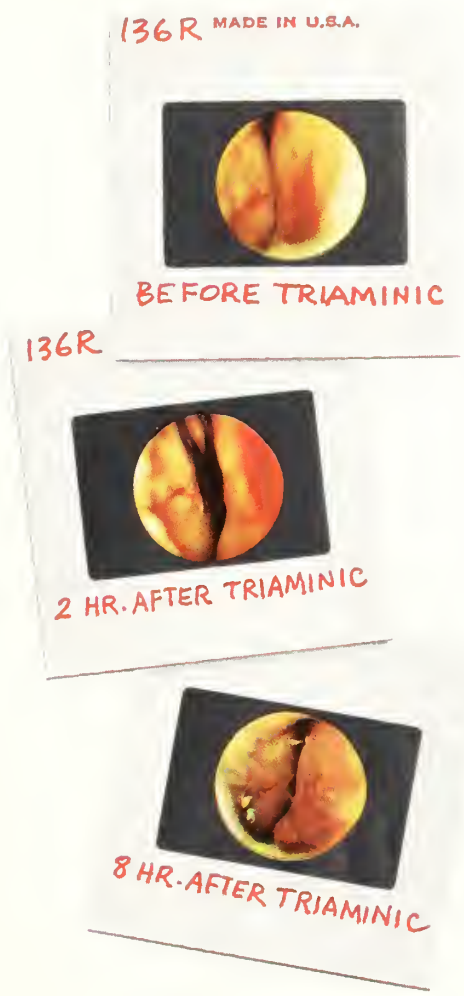
ess well recognized is the occurrence of this type of hyperemia in any part of the nasopharyngeal mucosa, again in varying degree. Such swelling often produces a postnasal drip which, the patient will state, is present only when she is pregnant. Patients who do not have symptomatic congestion ordinarily, will find that when they do get a cold, he symptoms last much longer than those of a cold sually do. Occasionally, this hyperemia is responible for closure of the medial end of the Eustachian ube; such patients will complain of "plugging" of he ears. Inspection of the ear drum will show a epression which confirms the presence of Eustahian closure rather than wax in the canal which is he patient's diagnosis. Symptoms related to this hysiological congestion are more apt to occur in eavier smokers or those who have a history of llergic rhinitis, just as are the symptoms of the ommon cold. And when the cold does occur in regnancy, the symptoms are worse because of the nderlying congestion.

The pregnant woman with a cold is miserable for ther reasons, dependent somewhat on her parity nd the length of her gestation. As parity increases, o also does the relaxation of the abdominal and erineal musculature. The uterus, lying against a ack abdominal wall, and bearing down on relaxed erineal muscles, acts like a piston when the patient oughs, sneezes, or even blows her nose, pushing own on the bladder. Stress incontinence during olds is almost the rule.

s the length of gestation increases, so does the size f the uterus. As it grows, it pushes the abdominal ontents above it and elevates the diaphragm. This esults eventually in a lateral displacement of the ower rib cage, often to a point at which the patient ill complain of soreness in this area. If such a

(Concluded on following page)

From a continuing study on nasal congestion...



timed to work while your patient does

A study begun in 1966 by the Department of Otolaryngology, Greater Baltimore Medical Center, has accumulated evidence that documents the effectiveness of Triaminic's timed-release action in the treatment of nasal congestion.

With its balanced formulation of an oral nasal decongestant and two antihistamines, Triaminic effected partial or complete relief in more than 82% of the 85 subjects treated. Clearing nasal obstruction. Reducing turbinate swelling. Making breathing easier.

It's a comforting thing to know that Triaminic really works.

Triaminic® *timed-release tablets*

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride	50mg.
Pyrilamine maleate	25mg.
Pheniramine maleate	25mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

patient has a cold, the coughing and sneezing will exaggerate this soreness. The diaphragmatic restriction caused by the enlarging uterus also makes breathing more difficult, particularly when the patient lies down. A cold compounds this difficulty.

Treating a cold in pregnancy requires two additional considerations. The patient should be told that the symptoms may last longer lest she become discouraged, and she should be reassured that the treatment will not damage the fetus. Although there are still some women who seem blissfully ignorant regarding matters of health (and these need to be cautioned not to take medication recommended by friends), most of our maternity patients are aware of the thalidomide tragedy. These women need constant reassurance that the symptoms of a cold can be treated, and that the medication is safe. Fortunately, many of the drugs which are of benefit have been in use long enough and widely enough so that such a statement can be offered. Occasionally one encounters a patient who is so anxious to avoid medication that she is extremely reluctant to take anything at all. Since cold is self-limited, it seems reasonable enough to give such a patient the choice and not to force drugs on her if she is obviously afraid of taking them.

The most distressing symptom of the common cold is the nasal congestion. This can be mitigated by the use of a decongestant which will help reduce the postnasal drip and the coughing caused by it. The kind of a cough which is described as a "tickling" in the throat and which is apt to occur when the patient goes to bed is usually due to nasopharyngeal congestion rather than inflammation in the lower respiratory tract.

There are many cough mixtures available. Most contain an antihistamine, a decongestant, and a cough "suppressant." Should cough suppression be desirable, it is important to remember not to use both a decongestant tablet and such a cough mixture as the patient would be getting a double dose of the decongestant. With some patients, the placebo effect of a cough syrup may be important and a liquid preparation might be substituted for an oral tablet.

For a sore throat, candy drops or lozenges at frequent intervals are soothing. It is not only unnecessary but unwise to use antibiotic lozenges or drops. The use of antibiotics in an uncomplicated cold is contraindicated and should be scrupulously avoided.

In summary, a cold in pregnancy is more severe and longer lasting. The treatment of the symptoms with local and systemic decongestants will make the patient more comfortable.

Apparently the cold is so common in pregnancy that it has received very little attention in the literature. References are almost non-existent and the few which are available add little to the common knowledge, are out-dated, or are not helpful. Thus the usual bibliography is not appended.



Relieve his sniffles, her concern, and about half your phone calls. Tell her to get "The Orange Medicine"



Triaminic® syrup

Each teaspoonful (5 ml.) contains:

Phenylpropanolamine hydrochloride	12.5 m
Pheniramine maleate	6.25 m
Pyrilamine maleate	6.25 m

For nasal congestion you can bring quick, lasting cor fort to your little patients with Triaminic Syrup. You m occasionally encounter these side effects: drowsines blurred vision, cardiac palpitations, flushing, dizzines nervousness or gastrointestinal upsets. Precautions: tl possibility of drowsiness should be considered by p tients engaged in mechanical operations requiring ale ness. Use with caution in patients with hypertensio heart disease, diabetes, or thyrotoxicosis.

(Advertisemen



Phenaphen® with Codeine

the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.) ..... 16.2 mg.
(Warning: may be habit forming)
Aspirin (2½ gr.) .....162.0 mg.
Phenacetin (3 gr.) .....194.0 mg.
Hyoscyamine sulfate .....0.031 mg.
Codeine phosphate.....¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A·H·ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

When the agitated businessman goes to work...

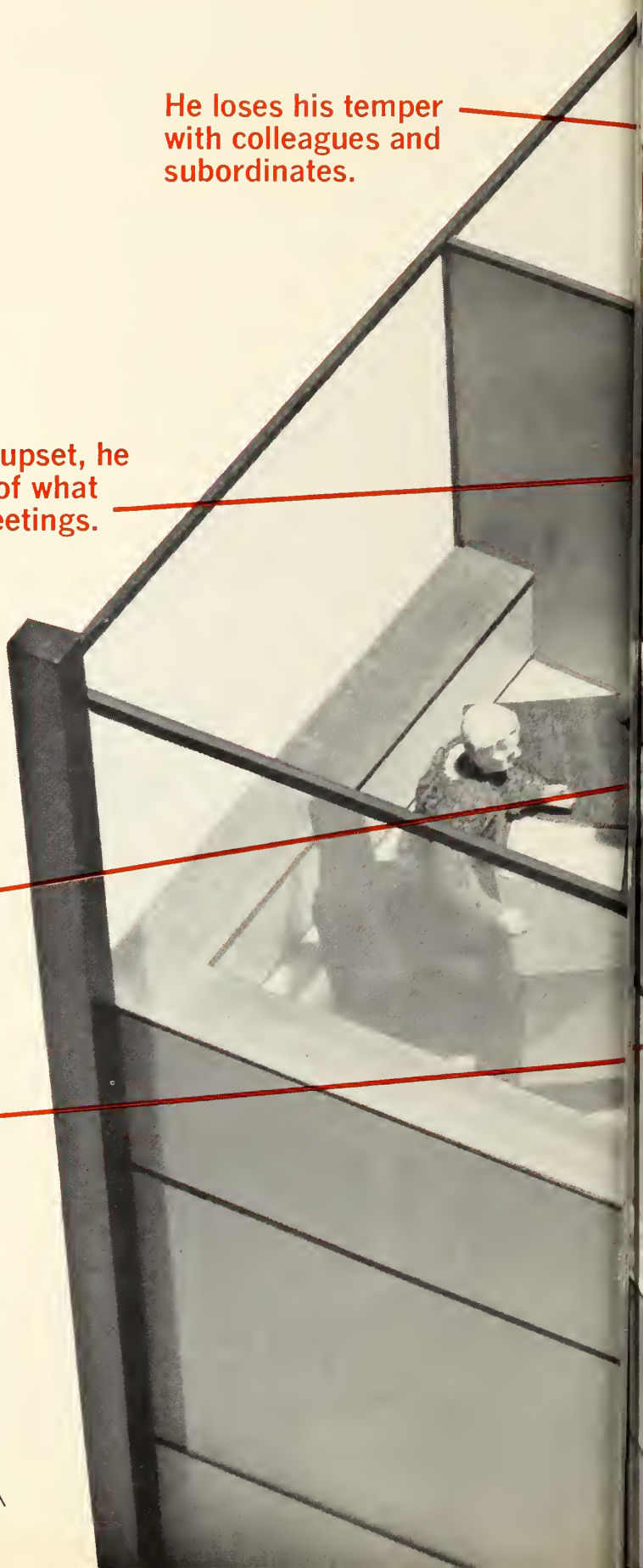
He goes home at night and takes it out on his family.

He loses his temper with colleagues and subordinates.

Emotionally upset, he misses half of what is said at meetings.

He is always fearful about his standing with the boss.

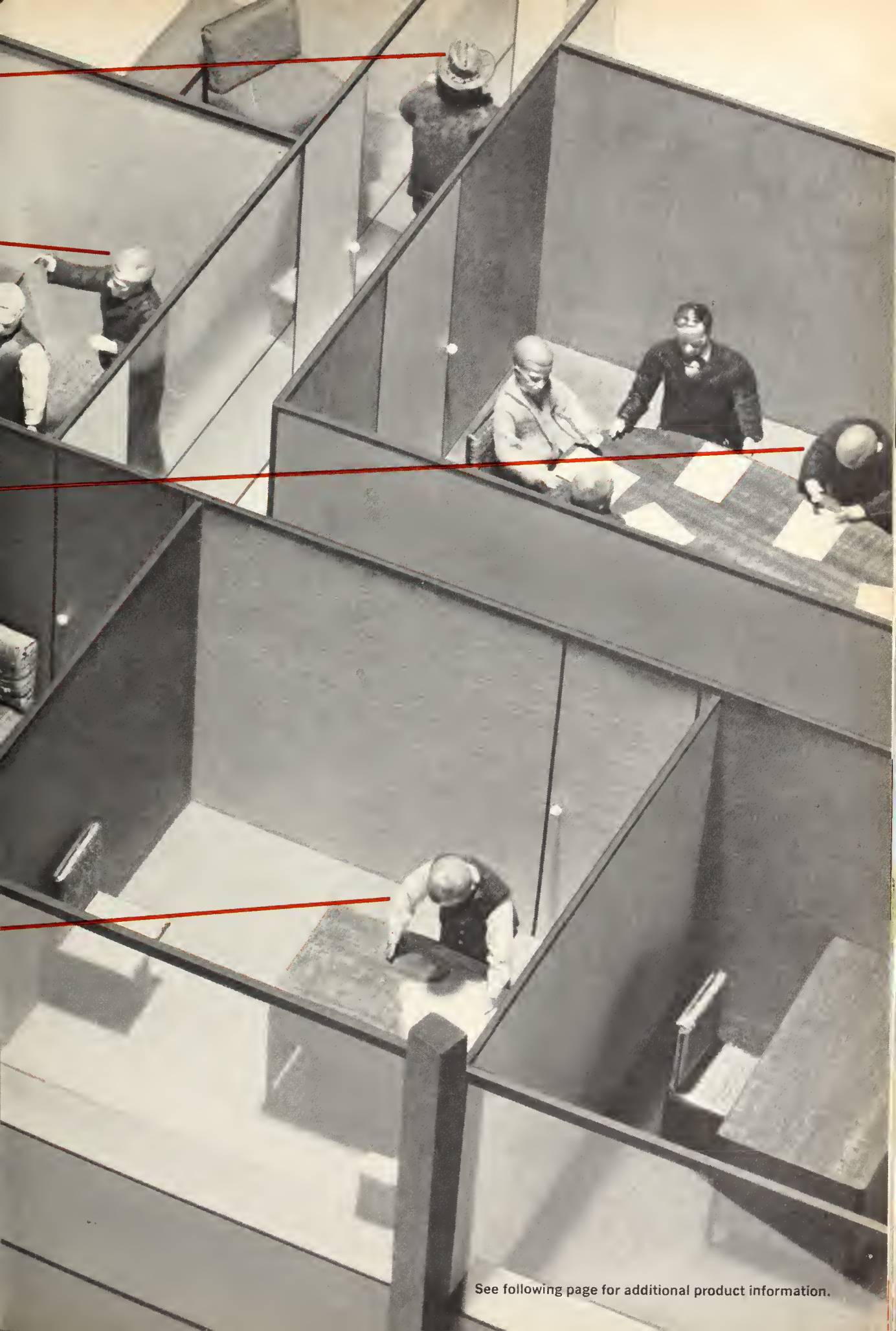
He just can't seem to settle down to his work.



for moderate to severe anxiety

Mellaril® (thioridazine) 25 mg. t.i.d.

SANDOZ



See following page for additional product information.

When the agitated businessman goes to work...

Anxiety that *seriously interferes* with the individual's performance at work, at home, or in the community may be regarded as *moderate to severe* in degree.

Mellaril often recommends itself to the treatment of moderate to severe anxiety because it

- helps control the most frequent symptoms: marked tension, agitation, apprehension, restlessness, hypermotility
- often alleviates anxiety-induced somatic complaints
- frequently helps strengthen emotional resources
- helps the patient maintain realistic contact with environment, closer harmony with family

Thus, when you consider the anxiety moderate to severe... consider Mellaril.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.

Before prescribing, see package insert for full product information.

for moderate to severe anxiety

Mellaril®
(thioridazine)
25 mg. t.i.d.

SANDOZ

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming...	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

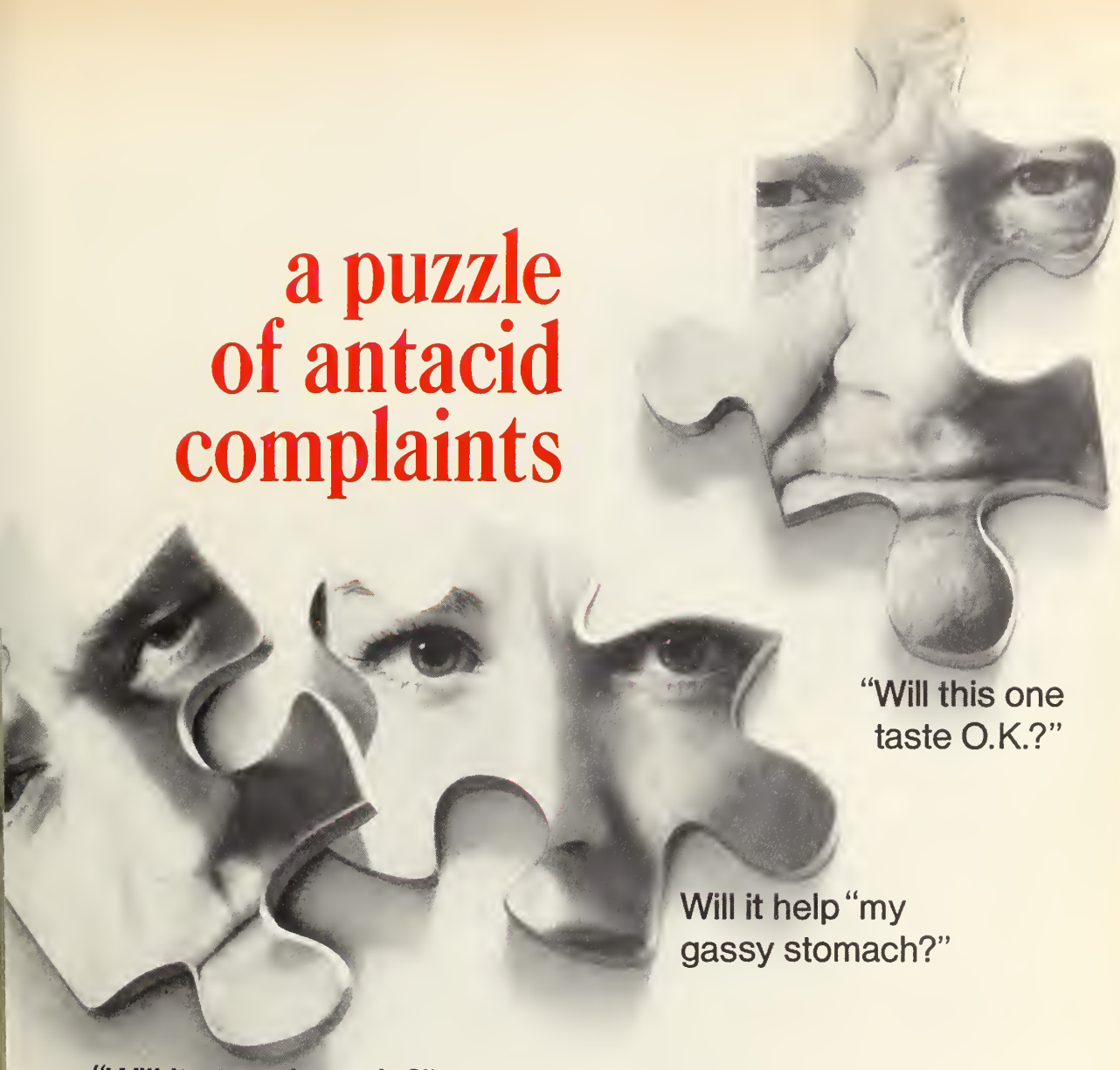
Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

a puzzle of antacid complaints



"Will this one taste O.K.?"

Will it help "my gassy stomach?"

"Will it stop the pain?"

Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

a solution to peptic ulcer distress

Effective neutralization—
with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

Concomitant relief of G.I. gas distress—
with the proven[1] defoaming action of simethicone.

Prolonged acceptance confirmed—
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Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart

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new evidence for TAO® (triacetyl-oleandomycin)

a macrolide antibiotic for the frequently seen respiratory infection in the office and for a problem pathogen* in the hospital.

*Staphylococcus aureus

study I[1]

Results of a 1967 **in vitro—in vivo** correlation study involving 116 patients with Gram-positive coccal infections in five institutions. All patients were given TAO prior to determining the susceptibility of the offending organism.

97.0%
of the organisms were susceptible to oleandomycin*

98.0%
of the patients responded favorably to TAO® (triacetyloleandomycin)

*In some cases more than one pathogenic organism was isolated from the patient.

study II[2]

Effect of oral therapy with TAO, erythromycin, and cloxacillin on the survival time of Rhesus monkeys after intravenous inoculations of lethal doses of staphylococci, phage type 80/81. (8 monkeys in each group)

conclusion:

*Under the conditions of this study and the doses employed, it was found that

TAO® (triacetyloleandomycin)

was far superior to erythromycin, as was cloxacillin, a bactericidal agent, and of particular interest, "...bacteriostatic triacetyloleandomycin was as effective or perhaps superior to cloxacillin in preventing lethal (staphylococcal, phage type 80/81) infection."

*It should be pointed out that results obtained in an experimental study of this nature may not necessarily be directly extrapolated to the clinical situation as it pertains to man.

TAO Rx Information

INDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents.

CONTRAINDICATIONS AND PRECAUTIONS: Not recommended for prophylaxis or in the treatment of infectious processes which may require more than ten days continuous therapy. In view of the possible hepatoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgement dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including darkfield examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug. Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

References: 1. Isenberg, H. D.: Clinical Evaluation of Laboratory Guidance to Antibiotic Therapy; Health Laboratory Science (July) 1967. 2. Saslaw, S., Carlile, H. N.: Studies on Therapy of Staphylococcal Infections in Monkeys. II. Comparison of Cloxacillin, Triacetyloleandomycin and Erythromycin. Proc. Soc. Exp. Biol. & Med.: Vol. 125, No. 4 (Aug.-Sept.) 1967.

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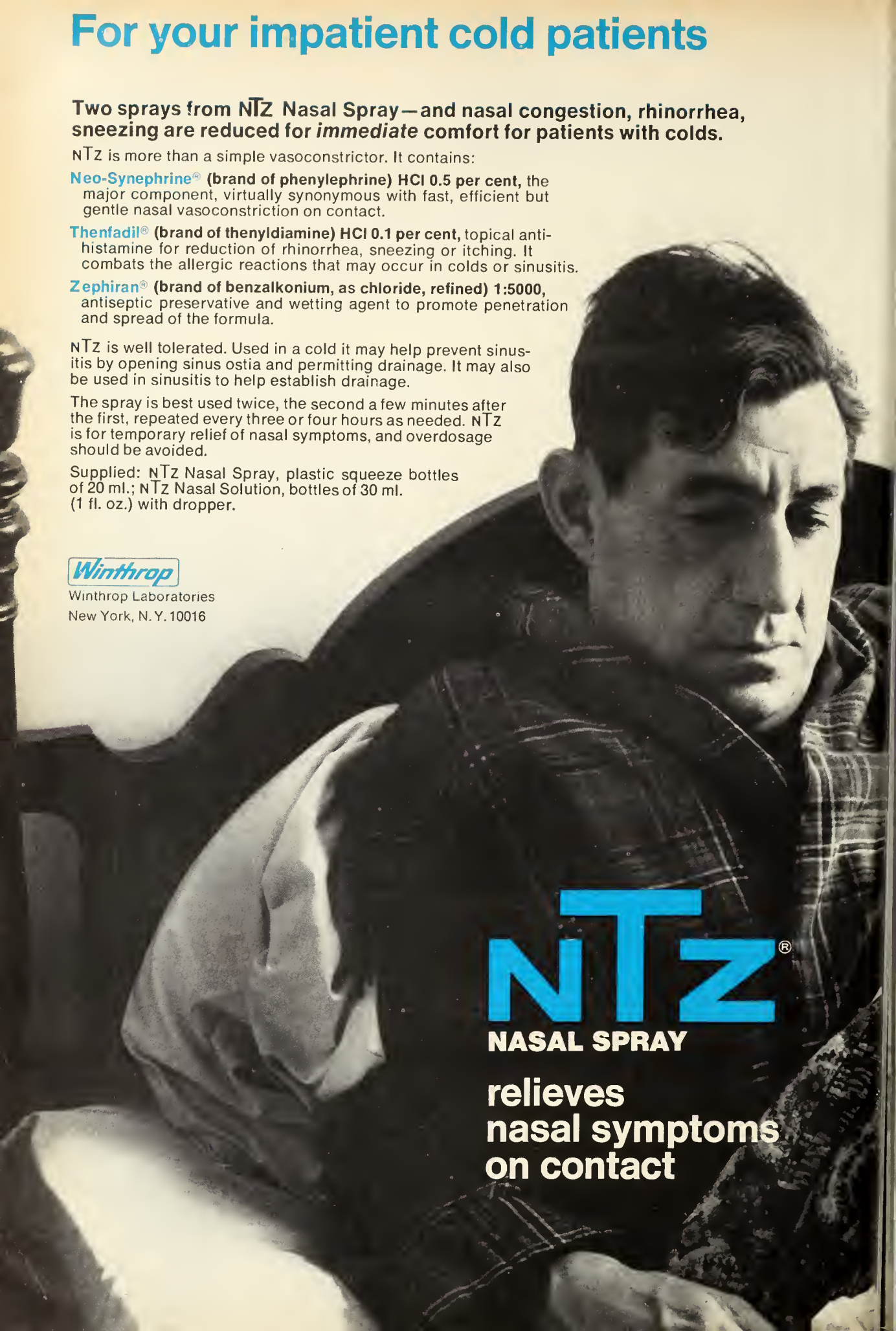
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The spray is best used twice, the second a few minutes after the first, repeated every three or four hours as needed. NTZ is for temporary relief of nasal symptoms, and overdosage should be avoided.

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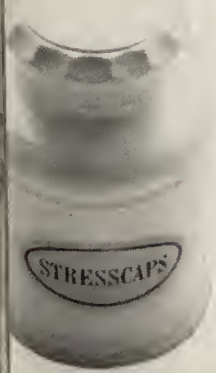
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Indications: Tofranil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of Tofranil and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before Tofranil may be substituted. Initial Tofranil dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, Tofranil should not be used during the first trimester of pregnancy.
Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment with Tofranil. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy.
Because of its anticholinergic effect, caution should be observed in prescribing Tofranil for patients with increased intraocular pressure.
In rare instances, transient cardi arrhythmias have occurred in hy thyroid patients and in patients r ceiving thyroid medication when Tofranil was added to the regime Imipramine may block the pharm cologic activity of guanethidine other related adrenergic neuron blocking agents.
The drug is not recommended a present time in patients under 1 of age.
Adverse Reactions: Dryness of t mouth, tachycardia, constipatio turbances of accommodation, s ing, dizziness, weight gain, urin frequency or retention, nausea a vomiting, peripheral neuritis, mi parkinson-like syndrome, tremo rare cases of falling in elderly p tients, confusional states (with s symptoms as hallucinations and orientation), activation of psych schizophrenics and agitation (ir

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omanic and manic episodes) may require dosage reduction addition of a tranquilizer or ary discontinuation of the drug, form seizures, orthostatic nsion and substantial blood e fall in hypertensive patients, , transient jaundice, bone marpression including agranulocytensitization and skin rash ng photosensitization, eosinond mild withdrawal symptoms den discontinuation after pro- treatment with high doses. onal hormonal effects (im-, decreased libido, and estro- ffects) may be observed. e-like effects may be more nced (e.g. paralytic ileus) in ible patients and in those nticholinergic agents (includ- parkinsonism drugs).
ent Adult Dosage: Initially, daily, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Tofranil: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
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Prescribing information on next page.

b.i.d. The sensible schedule that covers the patient day and night

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity: onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth— dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm. given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg. of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg. every 6 hours for a minimum of 4 doses or 300 mg. every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg. every 6 hours or 300 mg. every 12 hours until a cure is effected.

Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg. in 3 divided doses for six days.

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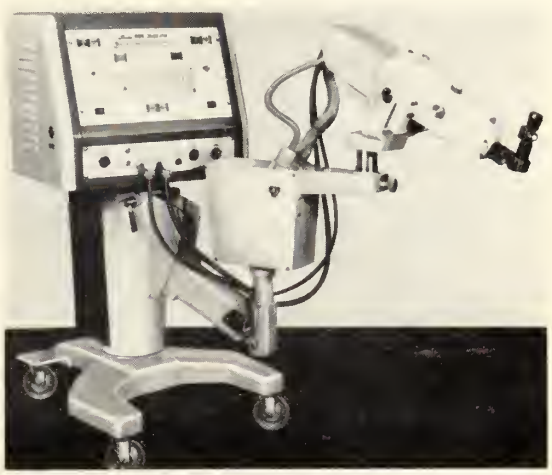
VOLUME 64 JANUARY, 1968 NUMBER 1

THE LASER IN OPHTHALMOLOGY

WILLIAM W. VALLOTTON, M.D.
Medical College of South Carolina
Charleston, S. C.

In April of 1965, the Lions Club of South Carolina presented the Department of Ophthalmology of the Medical College of South Carolina with a Laser photocoagulator. Since that time, it has been used on patients approximately 250 times.

The purpose of this paper is to describe the Laser and its uses. Townes (a fellow South Carolinian) and Shawlow first discovered the principle of the Laser in 1958. They found that by forcing an electron to shift from one orbit to another, a photon would be released from the atom. By bouncing these photons, or particles of light, off of mirrors, they could obtain more or less a chain-type of reaction (the photons stimulating other atoms to shift electrons and thus releasing more photons). Maiman, in 1960, demonstrated the first workable Laser using an artificial ruby rod. When the waves of photons reached a point of intensity capable of "bursting through" the lesser dense mirror on one end of the ruby rod, a brilliant flash of light would emerge from the ruby rod. This light would have the following characteristics: (1) collimation or bundling, (2) lack of divergence characteristics, i.e. an inch-wide Laser beam would only be a slight bit larger one mile away whereas an ordinary light would be many times larger, (3) monochromaticity—a ruby Laser light would measure 6943



Angstrom units, (4) the light would be about 10,000 times brighter than the light of the sun, (5) the light emerging would have essentially the same physical characteristics as ordinary light, i.e. it can be focused, diverged or converged with lenses, and (6) the light's energy potential could be controlled by variations of power input, ruby size, cooling, etc. Once such a method of controlling Laser light had been discovered, men began to think of practical uses for it.

Solar eclipses have long been known to cause retinal burns resulting in chorioretinal scars. In fact, an attempt was made at one time to use the sun through a system of lenses and a machine that would follow the sun automatically to allow the

concentrated rays to be focused on the retina in attempts to produce chorioretinal burns for sealing off holes in the retina thus helping cure a retinal detachment. This Heliostat was not a very versatile instrument and was eventually discarded. A very few years after World War II, Dr. G. Meyer-Schwickerath made a much superior photocoagulator using a high pressure Xenon tube as a light source. It is a well-built machine and has been used on tens of thousands of cases of detached retinas and other eye diseases amenable to photocoagulation. This machine is rather bulky, is difficult to use, causes some patient discomfort and requires some special preparations in its installation.

Almost immediately after the first Laser was made, experimentation began being directed toward using Laser light for photocoagulation of the retina, and in 1964, Zweng performed the first Laser photocoagulation of the human retina.

Perhaps the most significant use of this highly versatile light is in the repair of retinal holes and tears. Trauma to the eye, hereditary predisposition, and aging are some of the factors in the production of these holes and tears in the retina. Once the retina has a hole or tear in it, the vitreous of the eye may pull on the retina and fluid may accumulate under or leak through the hole, getting under the retina and causing it to separate from the retinal pigment epithelium, thus causing serious impairment of vision. If this is left untreated, total blindness may result.

By utilizing photocoagulation, an actual burn is placed on the retina and choroid in the area surrounding the retinal hole or tear, and a water-tight seal is effected thus preventing a possible further detachment. Unfortunately, there is usually a considerable amount of subretinal fluid present which prevents the use of the Laser or photocagulator. In these cases, an attempt is made to let the retina settle back against the choroid by gravity. This is done by putting the patient on strict bedrest with binocular patches.

If the vitreous is not pulling on the retina too much, the fluid may decrease enough to allow the retina to repose itself against the pigment epithelium and the choroid. When this condition has occurred, Laser photocoagulation can be done and the detachment repaired. If the holes are too far anterior in the eye to be seen through the viewer of the Laser, a cryopencil is placed on the eye and the temperature is dropped in the tip of the probe to about —70° F. The area of the hole or tear is being observed through an ophthalmoscope and is seen to develop a small ice ball. Several of these are placed around the involved area. Freezing of the retina and choroid accomplishes the same thing as Laser photocoagulation by creating a firm chorioretinal scar and sealing the break in the retina.

Unfortunately, many patients have too much vitreous traction on the retina and settling does not occur. In these cases, the sclera and choroid must be pushed up against the break in order to seal it off. The areas having retinal breaks are localized with indirect ophthalmoscopy, and the sclera overlying these breaks is pushed inwardly with silicone rubber implants which are sutured into place. Heat cautery, cryocautery or Laser photocoagulation may then be applied to the choroid and retina around the break, and a fluid-tight chorioretinal adhesion obtained. If there is too much fluid present to allow good chorioretinal coaptation, it must be carefully drained off. An operation of this type almost always requires general anesthesia, and the actual operating time may be from two to six hours. In contrast, Laser photocoagulation can be done in as little as five minutes without anesthesia of any sort. For anterior retinal breaks in which the cryopencil must be used, local anesthesia is necessary. Operations

using this method may be done in 15-20 minutes as an out-patient procedure.

The Laser that we use is made by the American Optical Company. It utilizes a ruby rod about the size of a cigarette. This ruby is stimulated by a Xenon photoflash tube to emit the Laser beam. After the beam leaves the ruby, it passes through a series of lenses to allow it to be focused on the retina of the patient's eye. This lens system is afocal in type—which means that none of the Laser's light ever comes to focus within a lens itself, or the lens would be destroyed by the Laser energy. The operator's eye is protected from bounce-back reflection from the patient's eye by a filter that slides into place the moment before the Laser is fired. The time it takes for the Laser beam to be made in the ruby rod and reach the eye is about 7/10,000 of a second, and has a very low power—about 0.75 joules. The ruby rod is water and air-cooled, as a rise in temperature of the ruby rod decreases its power and output.

A unique focusing device allows the operator such fine depth of focus that it can enable him to burn print pigment off of paper without burning the paper itself.

The Laser photocoagulator does have a few disadvantages. It is expensive, costing about $15,000. However, this is comparable to the Xenon photocoagulators. It is dangerous because the collimated light may be reflected many times and yet still retain sufficient energy to produce retinal burns in the eyes of bystanders. Observers of Laser photocoagulations in our Laser room are required to wear special "laser-proof" shades.

Since the beam emitted from the ruby is monochromatically red, retinal blood vessels are more or less immune to the Laser energy. This fact allows us to disregard a blood vessel if it gets into the line of fire. However, ruby rod Laser light cannot be used effectively in the treatment of diabetic microaneurysms or other blood vessel tumors of the eye because of this same monochromaticity.

We have found the Laser an extremely useful instrument in the treatment of retinal detachments. When a primary repair cannot be done with the Laser, we have often used it post-operatively to re-enforce chorioretinal adhesions in the areas of the retinal breaks. This is done a day or two following surgery. Here again, no anesthesia is necessary.

Recently, we have been able to treat with Laser photocoagulation areas of active chorioretinititis in the eye with the Laser when steroids and other medications have failed to halt the continuing inflammation.

The Department of Ophthalmology of the Medical College of South Carolina wishes to take this opportunity to again thank all of the Lions in South Carolina for giving us this wonderful machine.

ACTIVE MANAGEMENT OF ACUTE MYOCARDIAL INFARCTION. II.

DONALD E. SAUNDERS, JR., M.D.
2739 Laurel Street
Columbia, S. C.

Therapy of A-V Block Complicating Acute Myocardial Infarction

The incidence of complete or third degree atrioventricular (A-V) block as a complication of acute myocardial infarction has been variably reported as 2 to 8%,[1-4] and in two-thirds is noted within the first 24 hours.[2] In three-fourths of these cases the infarction is diaphragmatic (also called posterior or inferior) since a branch of the right coronary artery supplies the A-V node in 90% of human hearts. In the remaining one-fourth, complete A-V block is associated with anterior wall infarction and carries worse prognosis.[2] Reported mortality figures for complete A-V block complicating acute myocardial infarction vary from 39 to almost 100%,[1,4,5] making studies of comparative treatment methods difficult. There is no doubt, however, that many patients display transient A-V block which reverts to normal conduction either from drug therapy or spontaneously within a few hours or by the end of 2 weeks.[6]

Catastrophic complications which may occur in the presence of complete A-V block include not only ventricular standstill, but also ventricular irritability progressing rapidly to ventricular tachycardia and ventricular fibrillation. In addition, important reduction of cardiac output resulting in congestive heart failure and or further myocardial ischemia may result from an inappropriately slow heart rate in the presence of associated myocardial disease.[7,8]

Drug Therapy

Some authorities prefer to give drug therapy a thorough trial before inserting a transvenous catheter pacemaker.[3] Medical methods of treatment comprise the use of *atropine* in intravenous or subcutaneous doses of 0.3 to 1.2 mg repeated every four hours if necessary. This drug is effective when vagal influences are contributing to the problem, and may be useful in first degree A-V block (prolonged P-R interval), which may be associated with sinus bradycardia, and in some cases of second degree A-V block (intermittent dropped beats). The most important side effects are difficulty with micturition and central nervous system effects including restlessness and delirium.

Isoproterenol (Isuprel) may be given sublingually or rectally in doses of 5 to 15 mg every 1 to 6 hours and is available in 10 and 15 mg tablets. For the acute situation parenteral administration of 0.2 mg subcutaneously or slowly intravenously may be used; however, results can best be obtained with dose titration of an intravenous infusion in which 2 mg of isoproterenol are added to a bottle of 1000 ml of 5% dextrose in water and dripped in at varying rates, often 2 ml/minute (20-40 drops/minute depending on the type of infusion set used). Isoproterenol may be effective in second or third degree A-V block. It is very important for a physician to be in constant attendance during titration of an isoproterenol infusion because of the propensity of this drug to increase ventricular irritability. Another disadvantage is the unpredictable and sometimes eratic response of the A-V block to this drug.[1]

If a sympathomimetic drug with some peripheral pressor effect is desired, one may choose to use *epinephrine* rather than isoproterenol. Initial dose titration

may be accomplished by placing 4 ml of 1:1000 epinephrine (4 mg) in 1000 ml of 5% dextrose in water, in which case the effective dose is often in the range of 1 ml/min.[9] Careful monitoring for increased ventricular irritability is also very important with this drug.

Adrenal steroids have been reported to be useful in treatment of A-V block complicating acute myocardial infarction,[10,11] presumably due to the anti-inflammatory effect on injured conducting tissue. For rapid onset of action in the acute situation, hydrocortisone sodium succinate (Solu-Cortef) 100 mg or methylprednisolone sodium succinate (Solu-Medrol) 40 mg intravenously will be maximally effective within one hour. If this therapy is initially effective, high blood levels can be maintained by repeated intravenous or intramuscular injections of the same drug every 4 to 6 hours, or one may elect to continue steroid therapy orally with prednisone 10 to 15 mg every 6 hours. Potential hazards and side effects of continous steroid therapy are well known and will not be listed here. The not uncommon association of acute myocardial infarction and diabetes mellitus should make one alert for surfacing of latent diabetes or worsening of a known case secondary to steroid administration. Just as is true with atropine and sympathomimetic drugs, the effectiveness of steroid therapy is unpredictable in the given patient, and has added disadvantage of requiring a period of hours rather than minutes to be effective during the most critical phase of therapy of acute myocardial infarction.

Transvenous Pacemakers

Indications for the use of transvenous catheter pacemakers for treatment of A-V block in patients with acute myocardial infarction are not yet universally agreed upon. An obvious disadvantage is necessity to transport the patient to the x-ray department for fluoroscopic placement of a bipolar catheter through a jugular venous cutdown. This can only be circumvented by mastering the technique of threading a flexible wire through a needle blindly into the right ventricle under electrocardiographic control at the bedside. In skilled and experienced hands, the latter technique is successful in 80% of these cases.[1,12] Serious ventricular arrhythmias may be induced during placement of the catheter requiring ready availability of an electrical debrillator. Infection and ventricular perforation by the catheter tip are rare later complications.

Despite these potential problems with catheter pacemakers in acute myocardial infarction, there are a signicant number of patients, such as the one in the case report to be described, in whom transvenous catheter pacing during the initial period after infarction is imperative for survival. Modern active treatment of acute myocardial infarction is therefore incomplete unless this procedure is available.

One should make the decision to put in a pacemaker as early as possible to permit adequate mobilization of the necessary equipment and personnel before the patient is in marked distress requiring true emergency management. Once the pacemaker has been inserted there is considerable security in knowing that the heart can be effectively paced when and if necessary, and that digitalis can be used when necessary to treat congestive heart failure despite the presence of A-V block. This security is doubly important when experienced cardiologists are not in constant attendance, which is the case in the great majority of hospitals in which myocardial infarctions are treated. Local factors must weigh heavily in making therapeutic decisions of this type and criteria used in the Peter Brent Brigham Hospital[3] are not necessarily optimal for the average community hospital.

Many cardiologists experienced in coronary care unit work would put in a catheter pacemaker in patients with acute

infarction if either third degree (complete) or second degree (Wenckebach, 2:1, or occasional dropped beat) A-V block is present. Some would add first degree block with P-R interval greater than 0.30 seconds to this list of indications.[1] A-V block associated with anterior wall infarction would re-enforce these criteria, because of the poorer prognosis. In instances of first and second degree block, the electrical pacemaker may be kept off, to serve as a stand-by to be used should drug therapy fail to prevent the development of complete block or to maintain a sufficiently rapid ventricular rate. A catheter pacemaker in the right atrium may also be useful in diagnosis of arrhythmias by serving as the V lead of the ECG in which the P wave will have significantly augmented voltage. It may also be used to increase the heart rate should A-V conduction be intact.[6]

Once the catheter is being used to pace the patient, the rate will need adjustment to achieve optimal benefit from this parameter of circulatory function. The optimal rate not only varies from patient to patient, but also varies in the same patient from time to time depending on such associated factors as fever, infection, hypotension, and congestive heart failure.[7,13] Ventricular arrhythmia may be suppressed by increasing the heart rate in some patients. If the rate is too high, cardiac output and blood pressure will fall[13]; therefore, it is best to start at pacing rates of 70 to 80 beats per minute and titrate the rate by observing closely for signs of improvement in congestive heart failure, hypotension, mentation, peripheral vasconstriction, sweating, ventricular premature beats, and blood pressure—all depending on the individual circumstances involved. The energy level of the pacemaker impulse should be set at the lowest level which will be effective in capturing the ventricle in order to help prevent triggering ventricular arrhythmias should the patient's sinus rhythm return and pacemaker impulses intermittently fall on the vulnerable period (near apex of T wave).[14]

The pacemaker is turned off when complete A-V block is replaced by either stable 1:1 conduction or second degree block which can be controlled by drug therapy. The pacemaker catheter is preferably left in place for another 10 to 21 days as a stand-by for recurrence of complete block.

So-called demand pacemakers are now generally available. Demand pacemakers activate when the heart rate falls below a preset rate and drive the heart only until the heart's own rate increases again. These demand pacemakers avoid the potential danger of competitive normal sinus rhythm and fixed rate pacing, which may precipitate ventricular tachycardia and fibrillation due to increased sensitivity of the vulnerable period in patients with acute myocardial infarction.[3] For this reason, demand pacemakers are preferable for coronary care units. In addition, use of any electrical equipment in contact with patients with intracardiac catheter pacemakers is hazardous unless grounding is adequate and the manufacturer has carefully avoided current leakage.

Should the complete heart block persist beyond 2 weeks, it may be necessary to implant a permanent pacemaker before the patient leaves the hospital.

The following case report illustrates the life saving potential of temporary transvenous catheter pacing in a severely ill patient who was refractory to initial drug therapy for A-V block and who required immediate digitalization. The usefulness of variable controlled ventricular rates to meet current circulatory demands even when his own rate had increased to 88 beats per minute is also demonstrated.

W. J. was a 62 yr. old Negro male admitted to the Columbia Hospital on 5 June, 1966. Although diffuse anterior chest pain had been present for two days, he elected to remain in bed at home until the day of admission when he for the first time summoned his family physician. Examination

in the home revealed the appearance of severe illness with a blood pressure of 190/70 mm Hg, pulse 50, and diffuse inspiratory rales in both lung fields. An ambulance was called and he was brought to the emergency room and subsequently admitted. The initial electrocardiogram revealed complete A-V block with an atrial rate of 80, ventricular rate of 52, and typical changes of acute posterior wall myocardial infarction.

Within the first 30 minutes after arrival in the emergency room, he was successively given atropine 1.2 mg intravenously, hydrocortisone sodium succinate 100 mg intravenously, and isoproterenol 0.2 mg intravenously, all of which failed to produce any improvement in his cardiac rhythm. Because he was in early pulmonary edema, he was then given lanatoside C 1.2 mg intravenously.

He was then taken immediately to the x-ray department for passage of a transvenous bipolar pacemaker through the right superficial jugular vein under fluoroscopic observation with the image intensifier. Using the catheter pacemaker with the tip in the right ventricle his rate was gradually increased from 80 to 90 beats per minute over the next several hours, and he was more fully digitalized.

The serum glutamic oxalacetic transaminase reached a maximum of 220 units 24 hours after admission and the lactic acid dehydrogenase reached a maximum of 3,400 units on the third hospital day. His temperature rose to a maximum of 103 degrees on the third hospital day. Throughout the first two weeks in the hospital he required additional digitalis and diuretics for congestive heart failure, manifested by ventricular gallop rhythm, diffuse rales, and elevated jugular venous pressure. The pacemaker made it possible to "push" digoxin without fear of increasing the A-V block, and the ventricular rate was maintained at 100 to 110 beats per minute.

On the third day his ventricular rate with the pacemaker turned off had increased to 88 beats per minute, even though complete heart block continued. It was noted that when the pacemaker was turned off, his blood pressure declined from 130/80 to 110/80, his respiratory rate increased from 24 to 44 beats per minute, and his extremities became cool and moist within a few minutes. Improvement would occur within minutes after artificial pacing was resumed at 100 to 110 beats per minute.

On the seventh hospital day for the first time he showed second degree A-V block with Wenckebach conduction which could be converted to 1 to 1 conduction transiently with atropine. On the ninth day he for the first time showed continuous 1 to 1 A-V conduction without specific drug therapy. The pacemaker was turned off and the catheter was left in place for an additional 10 days. It was removed after a total of 19 days, and he was discharged doing well after a total of 30 days in the hospital.

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CARCINOMA OF THE PANCREAS: SURVIVAL WITHOUT RESECTION

A CASE REPORT

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There are many recorded cases of unexpected longevity following resection of what seemed to be incurable carcinoma. Such cases serve to illustrate an unknown and uncomputable factor in cancer prognosis. Among these are a few cases of long survival in treated cases of malignant pancreatic disease. Gordon-Taylor[1] reported partial resection of the pancreas for carcinoma in a middle aged man who lived 11 years before recurrence in the operative site. Weber[2] reported the five year survival of a man who had pancreatico-duodenal resection and reconstruction after the technique described by Whipple, Parsons and Mullins[3]. Smith, Krementz, Reed and Bufkin[4] in 1967 reviewed 600 patients with carcinoma of the pancreas treated at Charity Hospital of Louisiana. They had three patients who lived 5 years and two of these lived 10 years after surgery. However, Cattell and Pyrtch[5] in 1949 reviewed 60 cases of pancreatico-duodenectomy and reported: "It must be admitted that no patient as yet has been cured or lived 5 years or more."

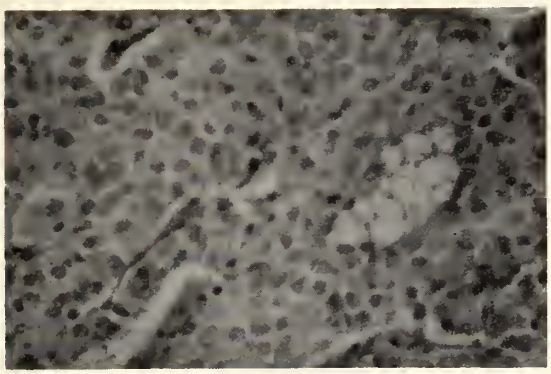
It is not our purpose to enter the argument whether to do or to forsake pancreatico-duodenectomy. Rather we wish to present an unusual patient with pancreatic carcinoma who survived 14 years without resection.

On August 26, 1952 a 55 year old white female was first seen because of pain and soreness in her upper abdomen. For the previous 15 years she had had episodes of "indigestion". At times this "indigestion" was accompained by dull abdominal pain and "gas". She attributed these episodes to dietary indiscretion. On several occasions she had nausea and vomiting but no hematemesis. No blood or melena was observed in her stools. Her present pain and soreness began 10 days previously. Food of any type seemed to increase her pain. This pain was never sharp but it had radiated to her left side and left shoulder. She was employed in a textile plant and had an excellent work record. She had a hysterectomy at the age of 32 and a bilateral varicose vein ligation with stripping at the age 54. On physical examination she was a small well developed woman with no abnormalities except slight soreness in her supraumbilical region, and the operative scars of her abdominal hysterectomy and varicose vein resections.

A cholecystogram and barium enema were normal. Urinalysis was normal. WBC 8,500 with 56 segmented neutrophils, 2 stabs and 42 lymphocytes. Hemoglobin 13 grams, urea nitrogen 8.5 mg, blood sugar 138.8 mg, icterus index 9.0, Kahn Test negative. On August 31, 1952 she was readmitted to the hospital. She had vomited several times. She felt that the upper part of her abdomen was distended and the previous type of epigastric pain which radiated to her left side and left shoulder recurred. There was no change in her physical conditon, except slight dehydration. On September 1, 1952 her icterus index was 7.6; cephalin flocculation+.

On September 3, 1952 an exploratory laparotomy was done. The gall bladder was found slightly distended but it contained no stones and emptied with very slight pressure. The common duct was estimated to be normal in size. A firm tumor measuring 15 by 7.5 cm and replacing the body and tail of the pancreas was found. Biopsy specimen of the tumor was reported as being probable carcinoma of the pancreas. A cholecystojejunostomy was then done. The patient was discharged from the hospital September 14, 1952. Her convalescence was uneventful and at her insistence she was permitted to return to work in less than two months. For about a year she requested and was given 12 fifty mg tablets of Demerol every six to eight weeks.

She was not seen again until August 14, 1954 when she fell and broke the distal end of her left humerus. This was treated by closed reduction and a cast. During this admission her abdominal findings



Tissue obtained by biopsy at time of second operation.

were normal except for her operative scars. Her hemoglobin was 11.4 with 7,700 WBC, 55 segmented neutrophils, one stab and 44 lymphocytes. Her icterus index was 11.7 Gm; blood sugar 106 mg; cephalin flocculation+; and thymol turbidity normal. She was discharged from the hospital August 18, 1954 but because of epigastric pain with nausea and vomiting was readmitted August 23, 1954. She was treated symptomatically. A chest x-ray film was normal. Her hemoglobin was 8.95 grams with 6,950 WBC, 73 segmented neutrophils and 27 lymphocytes. The packed cell volume was 40%. After two transfusions of 500 ml whole blood her hemoglobin reached 14.35 grams and PCV was 54%. A glucose tolerance test done on August 30 was abnormal, indicating mild diabetes.

	Fasting	1st hour	2nd hour	3rd hour
Blood sugar	70 mg/100 ml	244	224	179
Urine	0	0	0	0

Her diabetes mellitus was controlled with U-10 Lente insulin each morning. She was again discharged from the hospital on September 4, 1954. Her fracture healed. She returned to work and was not seen until October, 1958.

On October 2, 1958 she was readmitted to the hospital complaining of pain in her epigastrium with nausea and vomiting of two weeks duration. She had slight diarrhea. No physical changes were noted except for a small mass in her epigastrium which was estimated to be 10 x 10 cm in diameter. It did not pulsate. October 3, 1958, x-ray "Examination of the upper GI tract reveals a large upper gastric mass pushing the fundus of the stomach to the left and downward. There is no intrinsic lesion of the stomach noted. There is noted a communication between the jejunum and the gall bladder well filled with barium from the fundus into the cystic duct and there is a small amount of air in the proximal common duct". October 4, 1958, "Barium enema normal". October 6, 1958, "Intravenous pyelogram reveals both kidneys low in position, evidently due to the upper gastric mass. The collecting structures appear normal with prompt functions". Her hemoglobin was 11.8 grams with 6,350 WBC, 68 segmented neutrophils, 28 lymphocytes, 2 eosinophils and 2 basophils. Her urinalysis remained normal. It was recommended that the patient have a laparotomy but she refused and after discharge from the hospital October 7, 1958 had no treatment until 1961.

On March 29, 1961 she was again admitted to the hospital complaining of severe episodes of abdominal pain almost every day. Nausea sometimes accompained the pain. Again on physical examination she appeared in fairly good health. The mass in her epigastrium now measured 12 x 14 cm in size and was firmer than it had been four years previously. The mass was not tender. Two separate masses measuring 2 x 3 cm and 2 x 4 cm were just inferior to the larger mass. X-ray films taken March 30, 1961 are reported "Gall bladder examination fails to outline a gall bladder shadow with oral contrast media. However, a small amount of air is visible in the gall bladder and the bile duct system. The esophagus appears normal. The stomach is pushed far to the left flank by the previously described large tissue mass in the left upper quadrant. This mass is unchanged in size or shape since the last examination. The stomach is flexible. Peristalsis is normal. The duodenal cap shows no abnormalities. Gall bladder fills with barium and appears normal. Impression: Large soft tissue in the left upper quadrant displacing the stomach to the left. This mass is unchanged in appearance since the last examination 3 years ago. The gall bladder has been anastomosed to the small bowel and fills with barium. The gall bladder is not outlined with gall bladder dye. Negative small bowel study."

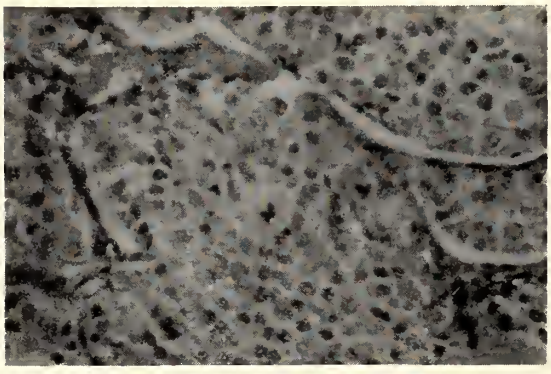
Her hemoglobin was 13.5 grams with 8,153 WBC and a normal differential. Her serum amylase was 75 mg and her urinalysis was normal. On March 31, 1961 a laparotomy was done. The epigastric mass completely replaced the body and tail of the pancreas. It was 8 cm in width by 12.5 cm in length and 6 cm in depth. The omentum contained 4 masses about 3 cm in diameter, of rubbery consistency, and light purple in color. The masses were excised. The periaortic lymph nodes were markedly enlarged but there was no tumor involvement of the stomach or liver. Sections of the excised nodules revealed fibrous tissue extensively infiltrated by plugs of malignant epithelial cells. There appeared to be a tendency toward gland formation. The primary site could not be detected and the tumor was diagnosed as metastatic adenocarcinoma of the abdomen. Her wound healed promptly and she left the hospital on the 13th postoperative day.

On May 19, 1964 she was again admitted to the

hospital with nausea and vomiting and a hemoglobin of 5.5 grams. She improved after transfusion of 1000 ml whole blood and symptomatic therapy. She left the hospital June 7, 1964.

On February 4, 1965 she broke her left humerus, which was treated with a Velpeau bandage. The fracture healed. In early 1966 her abdominal pain became more severe, with nausea, vomiting and weight loss. She again fell and broke her humerus. May 23, 1966 she died.

Autopsy revealed normal lungs except for posterior congestion. The liver weighed 1700 grams and contained 8 nodules of neoplastic tissue measuring up to 5 cm in diameter. The pancreas was replaced by a 17 cm lobulated mass of firm rubbery neoplastic gray tissue. The left adrenal gland was distended by a 4 cm neoplastic mass. The small and large bowel contained numerous mesenteric nodules of gray neoplastic tissue measuring up to 1 cm in diameter. The brain was not examined. Final pathological diagnosis was carcinoma of the pancreas with metastasis to the liver, adrenal gland, omentum, mesentery and periaortic nodes blocking the right ureter and producing right hydronephrosis.



Tissue of the tumor at the time of autopsy.

A similar case has been mentioned by Everson and Cole.[6] They refer to Dr. W. E. Davison's case of an 84 year old male, who on October 31, 1956 underwent a laparotomy for painless jaundice. "No stones were found within the common duct and the pancreas was only slightly firmer than normal. A small, rather hard node just medial to the duodenum was removed for histologic examination and a cholecystojejunostomy was performed. On microscopic examination of the nodes a diagnosis of well differentiated adenocarcinoma was made. The diagnosis was confirmed by several pathologists. The patient was known to be alive and with no clinical evidence of jaundice or cancer in August, 1965". No explanation of the long survival is offered by Drs. Everson and Cole.

Neither is an obvious explanation apparent in our case. We recognize that certain factors are accepted as determining the prognosis of cancer patients. These are generally thought of as (a) histological grading of the tumor; (b) the infiltration of surrounding parts; especially the neighboring veins and lymphatics; (c) the invasion of lymph nodes; (d) the presence of local or distal metastasis; (e) the method of treatment; (f) the general health of the patient (g) and the patient's resistance to his own cancer. This patient exhibited most factors of an unfavorable prognosis at the time of her first laparotomy in 1952. Again in 1961 laparotomy revealed an extension of the unfavorable factors, and a larger tumor with local and omental and mesenteric extension. Despite these findings, this patient remained healthy in appearance for over 13 years. She carried a full work load and certainly found life more pleasant than many patients.

We submit that this patient represents the incomputable factor in cancer prognosis. This is the longest recorded survival of proven carcinoma of the pancreas.

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CLINICAL NOTE

A PRACTICAL TECHNIQUE FOR THE RESUSCITATION OF THE NEWBORN

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At a time of cardiac arrest, the physician often finds himself without benefit of proper resuscitative equipment, especially in the newborn nursery. Few hospitals are equipped with artificial breathing apparatus for infants.

Here is an effective, practical, and available means to inflate the lungs of a newborn baby in distress.

A single towel is rolled and placed beneath the shoulders of the baby lying supine in his incubator or crib. The head is thus thrown back with the neck extended. The nasopharynx is aspirated for mucus plugs. The infant's mouth is closed. The chin is elevated with the finger tips of the left hand, with the left thumb against and closing the left nostril. The tip of a standard three or four ounce bulb syringe is inserted into the right nostril and the bulb is squeezed, forcing the air through the nasal passages into the throat and bronchial tubes of the baby, inflating the lungs by positive pressure. By releasing the pressure on the bulb, air is sucked out and the lungs deflated by their own compliance and by negative pressure suction.

Mucus can also be aspirated at the same time. This procedure can be repeated often without tiring the resuscitator. Cardiac massage by two finger compression over the lower one third of the sternum can be done, alternating the massage and artificial respiration.

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Hemicorporectomy: Hemodynamic and Metabolic Problems—Pano A. Lamis, Jr., A. J. Richards, Jr., and M. G. Weidner, Jr. (Charleston) Amer Surg 33: 443-448 (June) 1967.

Hemicorporectomy, translumbar amputation, has been proposed for excision of extensive malignant conditions of the lower body with no evidence of distant metastases. Several reports have demonstrated the technical feasibility of the procedure. The post-operative metabolic and hemodynamic responses however have presented serious problems. A 38 year old patient with massive extension of carcinoma of the penis satisfied the criteria for the operation. On December 14, 1964, he had a translumbar amputation at the L4, L5 level. He had a very difficult post-operative course and died approximately 32 days later.

During his post-operative course he was studied very thoroughly from many standpoints. It was extremely difficult to control his acid-base equilibrium and fluid replacement. It is difficult to generalize from this limited experience, but certain recommendations are made for the post-operative care of these patients in the future. An accurate determination of all fluid losses should be made with volume for volume replacement of water in all external losses.

Electrolyte replacement should be calculated on basis of the measured electrolyte content of the lost fluids. Careful and continuous measurements of the patient's weight seem to be unquestioned. Central venous pressure monitoring and cardiac output determination are excellent guides and should be used to guide fluid replacement. General care should include a gastrostomy, readily available fresh whole blood, and the use of mechanical respirators.

It should be noted that other patients have had the operative procedures performed who apparently have not demonstrated this marked difficulty; however, most of these patients have been those with extremely small body mass in their extremies. It is also noted that several patients have been rehabilitated and are living a functional life.

X-RAY FILM OF THE MONTH

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This 63-year old white male was seen by his physician for a complaint of exertional dyspnea and the chest film, Figure 1, was taken at that time. After a suggested radiological diagnosis, he was treated medically, and the second film, Figure 2, was taken one month later.

This is an example of the so-called "vanishing tumor" of the lungs. This is a term for a localized transudative, interlobular pleural fluid collection resulting from congestive heart failure. While at first glance it resembles a solid neoplasm, following effective diuresis as shown here from digitalis and diuretics, it will disappear, hence the name.[1]

A lateral film is of great value in demonstrating the fluid to be in the fissure. Quite often this loculation may be the only fluid seen in the pleural space. Most authors seem to feel that this is the result of an obliterative pleuritis, which makes the larger portion of the pleural space unavailable for the accumulation of fluid.[2]

The majority of the reported cases are right-sided, and can be in either the transverse or oblique fissure. When the fluid is in the oblique fissure it tends to be hazier and less well demarcated than a collection in the transverse fissure on the posterior-anterior roentgenogram. Obviously, early recognition will prevent the patient having to undergo the usual diagnostic tests that might otherwise be employed in the management of a true lung tumor.

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Presidential Address: The Sins of the Surgeon—C. P. Artz (Charleston) Amer Surg 33: 597-601 (Aug.) 1967.

Probably the greatest sin of surgeons as a group is the sin of sloth in which there has been a distinct disinclination to action in many facets of the profession. We have not looked at the needs of the people of our country in a realistic fashion. Since 1945 the population of the United States has increased by nearly 40 per cent and this increase continues. By the end of this decade there will be nearly 210 million Americans and by the end of the century more than 300 million.

We have not organized our surgical practices best to exploit our capabilities. More partnerships and more clinics are needed for the better utilization of our talents. Medical care must be looked at from the patient's point of view, not just the doctors'.

Many surgeons are really slothful in their approach to postgraduate education.

A surgeon should spend a minimum of two weeks per year in real postgraduate education. This may mean participating in a course or going to a postgraduate meeting. It has been difficult to measure how well physicians keep up with the changes in medicine. Ninety per cent of what we know and utilize today was not known 20 years ago. In this rapidly advancing age surgeons must budget their time and energy for acquistion of new knowledge.

Undoubtedly there are many virtuous avenues that should be pursued—I would like to propose five for your thoughtful and conscientious deliberation.

1. Every surgeon should use his time, influence, talent and money to promote expansion and increase in the number of medical schools. It is obvious that we need more physicians.

2. Every surgeon must accept responsibility in his own community for improvement in the organization and extension of medical care. If this responsibility is not taken by us physicians, someone will be appointed or elected by the consumer to do it. Regionalization appears at the present time to be a highly efficient method of improving medical care in our large population with a limitation of professional manpower.

3. Physicians in general should provide a representative organization, such as a national academy of medicine! perhaps surgeons should take the leadership in the formation of such a group. A single organization of approximately 100 physicians representing the highest excellence in medical practice, medical education, research and the basic sciences as well as all the specialties should be available for opinions and guidance when legislation and other changes related to medicine are under consideration.

4. Greater emphasis must be placed upon postgraduate education. Specialized postgraduate courses should be increased; greater importance must be given to the acquisition of good teachers even if this means providing them with adequate remuneration for the time spent away from their offices.

5. There is a great need to delineate who is permitted to do surgery. Obviously, improvement in care will come when only those individuals trained in surgery are permitted to perform major operative procedures. Are we coming to a time when surgeons will be licensed to perform their art? And now in summary, surgeons in America should be joyful in their accomplishments of the past quarter century. They should face the new challenges of the revolutionary future with a youthful and optimistic spirit. They should direct their energies more than ever before toward improved organization for the more efficient care of all peoples. We must not supplant our sins of the past with other evils but replace them with new virtues as these new challenges arise.



President's Pages

This is the substance of an address to a local service club.

A large segment of the public feels animosity towards the medical profession—not towards individuals but towards the group. Most people think their physician is a wonderful person but they are prejudiced against physicians as a class. There is one particular reason for this physicians cannot deny: when a person gets sick and has to call a physician he is forced to buy something (the physician's services) that he did not want in the first place. He might joyously spend four or five thousand dollars for a car. That is something he wanted. But who *wants* to get sick, who wants to pay a physican.

Now though let us look at some of the *debatable* complaints the public thinks it reasonably has against physicians. 1. There is no guarantee the physician's services are going to be successful—even death might come in spite of his most valiant efforts. 2. All expense related to an illness is usually blamed on the attending physician—nurses, medicines, appliances, hospital bills, etc. (The physician actually gets *less than one third* of the "health dollar".) 3. All doctors are rich, got rich quickly, and did it by gouging the public. 4. Doctors will not work much, you can't get one when you want him, they will not make house calls and certainly not at night. etc., etc.

Now obviously where there are so many complaints against a profession, identical complaints common to every town and state scattered across the nation, one of two things had to occur. 1. The complaints were organized and publicized deliberately by some group or 2. The profession is indeed made up of renegades, charlatans, and criminals.

Could it be that the public has been meticulously, skillfully, deliberately misled by people bent on the destruction of our profession as it now exists? Consider the ambitions of the social planners, the liberals, that group of politicians desperately anxious to get their hands on the thousands of jobs to be handed out under socialized medicine. And consider those who *sincerely* believe in the desirability of socializing our nation. Could it be that these people have performed the perfidious near-miracle of brainwashing this nation as to its attitude toward the medical profession? Could it be?

There is no point in taking time to refute individual charges. By proving a person wrong we would simply win a battle and lose a war. Nobody wants to be proven wrong in specifics. And so far as the unscrupulous are concerned as fast as you prove them wrong about one complaint they manufacture two more.

Instead let us look at the fundamental premise on which the supposed complaints are based. If the fundamental premise is wrong, immoral, intolerable the entire case collapses. A fire cannot be extinguished when no fire exists. Could it be that our opponents are manufacturing a case by yelling fire when no fire exists?

Most of this propaganda started during the First and Second World wars. The rate of people rejected for military service because of having received improper, or no, medical care was astounding. News releases stated thirty, fifty, even sixty percent of draftees were rejected for medical reasons. The national news media, most of which is

liberal, blazoned the "news" all over the world. But do you have any idea how many categories were included in these startlingly high percentages of "rejects"—*medical* rejects? Included were those who could not read and write, those who were born with conditions for which there was no known treatment, those who had been saved from imminent death by miraculous medical care (such as cardiacs successfully operated on for congenital heart defects). Obviously these people could not possibly be classed as having been rejected because of lack of proper medical care. *But they were.* And the resulting false statistics have been cited every since as proof of the lack of proper medical care received by our people.

Obviously the fundamental premise on which the accusations against the medical profession were made is wrong, immoral, and intolerable. The only fire was an artificial fire, the only alarm a false alarm. The entire premise was intolerable and the socializers' case collapses if regarded with impartiality.

Our profession is not perfect but then none is. There is room for vast improvement and unbelievable improvement has already been made. Our own medical school graduates twice as many physicians now as it did when I graduated and shortly it will be graduating three times as many—120 a year to be exact. And today's physicians and those graduating are just as dedicated to humanity as were those fifty years ago. Physicians have not changed: people's opinion has changed or, rather, been manipulated.

Obviously most of the charges against us are artificial, created, cultivated, and propagated by a highly dedicated group, a group dedicated to the socialization of medicine—and of the nation. Make no mistake about it either. If they succeed you will find them just as determined to destroy and socialize *your* profession, the banks, the farmers, the merchants, etc. These ultra-liberals are zealots.

Well, what can we physicians do to defend ourselves? In a way, very little. We cannot go round shouting our praises. A virtuous woman who runs around bragging how virtuous she is generates the attitude "Methinks she doth protest too much".

Professionally, all we can do is go our way in honor and dignity. But there is something else we can do outside of our profession, something we *must* do. We must enter the political life of the nation. We must become politically informed and active. No longer can we naively leave the selection of a president to labor union leaders. Some fifteen million people belong to labor unions. *But all the rest do not.* You and I and all of us *must* take our political responsibilities more seriously. It is no understatement to say that it is a life or death proposition.

The medical profession wants no special dispensation. All we ask is intelligent consideration, consideration free of bias and political chicanery. If the premise on which a case is based is proved wrong the whole case falls. I think this has been shown here. The socializers' premise is based on false propaganda. I am not ashamed of the medical profession. I am ashamed of the socializers who sail under false labels. If the nation wants to be socialized it has a perfect right to be socialized. But let us not make the mistake of having it inflicted on us unbeknownst!

Norman O. Eaddy

Editorials

The Governors Council on Health

Twenty four individuals, all but four of them in some official position, have been appointed by the Governor to act as an advisory council for developing a state health plan which will provide for the health needs of every person in South Carolina. The Council includes representatives of state departments concerned with health matters, of professional organizations in the health field, and other groups less specificially related to health, such as the NAACP, the Farm Bureau, and various councils and educational institutions.

There have been a number of Health Councils in the past, but none so broadly constituted or officially backed. Most of them have stumbled over the usual root of all evil. In the light of their vast experiences, many in existence should be valuable councillors to the Council in getting its plans under way.

* * *

To Save or Not To Save

Modern equipment intended for resuscitation of patients with cardiac or respiratory arrest is commonly available in hospitals. An emergency call brings quickly a team and its equipment. The urgency of speedy action often disallows time for consideration of the basic desirability of saving a patient in sudden distress whose survival may mean only sorrow and trouble for him and his family.

Some hospital staffs have adopted the policy of discussing beforehand the need for using or withholding heroic measures of resuscitation on individual patients. One London hospital staff considered that there were several categories in which efforts should not be made. They were 1) the very elderly (over sixty-five!) 2) those with cancer, 3) chronic chest disease, or 4) chronic renal disease. A patient in this hospital, getting wind of the standing rules, alerted a national broadcasting system, which, along with other media, produced numerous indignant programs. These dramatic expressions led the Minister of Health to make an investigation through a committee, which commended the Chief of the Medical Service for his foresight and guidance, but deplored the publicity attached to the memorandum that the patient had seen. Furthermore it pointed out that narrow classificiation of patients was dangerous, and that judgment of a situation should always be individual.

It is interesting to know that the response of the general public was far more favorable than would have been expected from the sensational outbursts from the communications media.

* * *

The South Carolina Tuberculosis Association

On the cover of the annual report of this organization, well recognized for its accomplishments, is the note "Fifty Years of Service" and indeed its service has been a good one. Starting its work very modestly under the name of the Red Cross Seal Commission in 1912, with a budget of $400, it became the South Carolina Anti-Tuberculosis Association in 1917, and now fifty years later as the South Carolina Tuberculosis Association works with a fund of nearly $400,000. Primarily its goal was education. Gradually it worked with and for the State and County Boards of Health in promoting establishment of sanatoria, providing nurses, chest clinics, scholarships, nutrition camps and the like.

In spite of the loss of its funds in the depression of the 1930's, the Association came back vigorously, initiating x-ray surveys, case findings, and tuberculin test-

ing. The recent general decline of tuberculosis seemed to indicate that its goals had been nearly accomplished, but a new increase in the disease shows that the effort toward eradication cannot be relaxed.

The successful and active course of the Association now allows it to extend its interest to non-tuberculous pulmonary disease, which appears too to be growing in seriousness and frequency. In view of this, the recently expressed thought that sanatoria are now of limited usefulness appears to be unjustified.

The Association carries on with the assistance of a large body of volunteers. Many of our prominent citizens and physicians have been active workers in its growth, so many that it is hard to ascribe major credit to any one of them. Among those who showed early interest in the movement to control tuberculosis were Dr. John L. Dawson and Dr. Robert Wilson of Charleston. The leader of efforts to organize action in a state level was Dr. Reed Smith of Columbia. The rank and file of volunteers have shown continuing dedication to the cause, and have made the work of the Association possible and successful.

The Future of Tuberculosis Control in South Carolina

With the death of Rudolph Farmer on 12 October 1967 the State lost a dedicated physician who devoted his life to the study and treatment of patients with tuberculosis. As a member of the staff of the South Carolina Sanitorium, usually referred to as State Park, from 1930 until his death, his name became synonymous with the tuberculosis program in South Carolina. After he became the Superintendent and Medical Director of the South Carolina Sanitorium in 1934, he continued to strive for improvement in services the State could offer its citizens afflicted with this long time scourge of mankind. The State will be forever indebted to him for his devotion to duty and service throughout his life.

With the passing of Dr. Farmer, however, there has come a time for reappraisal of the method and methods of tuberculosis control in the State of South Carolina. During Dr. Farmer's lifetime, the emphasis in tuberculosis control was primarily upon case finding and isolation of the patient from the well public, for the protection of the latter as well as for the treatment of the former. Since the advent of the specific anti-tuberculous agents around 1950, the efficacy of treatment has improved strikingly and the duration of hospitalization for isolation has been markedly shortened. This shortening in the time of hospitalization has led to a decrease in the number of hospital beds needed for tuberculosis and a consolidation of hospitals to allow the closing of some. This in turn has led the public, and to some extent the medical profesison, to the general belief that tuberculosis is no longer a significant problem. Unfortunately, nothing could be farther from the truth. The decline in the mortality rate and the decrease in the duration of hospitalization have not been accompanied by a proportionate decrease in the number of cases in the population. There remain an estimated 25,000,000 persons affected with tuberculosis in the country today, and there are still approximately 50,000 new cases reported each year.

In view of the large tuberculosis problem which does exist throughout our state and the nation, a change will have to be made from the traditional methods of dealing with it. The importance of the principles of prolonged isolation, prolonged bed rest, outdoor living, and elaborate regulation of diet and physical activity have been altered dramatically since the advent of safe and effective antimicrobials for the treatment of tuberculosis. In the future, in the continued effort to eradicate tuberculosis, more emphasis will have to be placed upon prevention of the disease as well as upon its treatment after the

onset of its activity. In addition to hospital services, there are now and will be needed increased out-patient services and improved laboratory services. These are pressing needs. Better continuity of care is needed. The importance of out-patient care now equals or even exceeds that of inpatient care. There is needed improvement of services for the care of non-tuberculous respiratory diseases, many of them chronic and extremely disabling. There are needed increased resources to make available the improvements that are needed so urgently.

It is hoped that the Governor and the Board of Trustees of the South Carolina Sanitorium will give due consideration to the changes that need to be wrought. Serious consideration should be given to placing the entire Tuberculosis Control Program under the State Board of Health, since hospitalization is only one component of a complete control program.

Edward F. Parker, M.D.

Pioneers in Vitamins

With "vitamins" a household word and the joy of Madison Avenue, it seems hard to realize that some 55 years ago we blundered along ignorant of our dietary deficiences and reasonably content in that unfortunate state.

Two of the great pioneers in the field from which grew our present knowledge of these substances have recently gone to their rewards. Certainly their contributions to our knowledge of health entitle them to the best of whatever is to be had in the scientist's heaven.

Dr. Casimir Funk was a Pole who came as a young man to this country, then returned to direct an ideal laboratory in Warsaw, later coming back to the United States. He made contributions related to hormones and cancer, but his best known work was the discovery of thiamine, accomplished in his search for a cause for beri-beri. He always emphasized that the necessary vitamins came from a proper diet, not from bottles.

Dr. Elmer V. McCollum made his contribution by observation of nutritional experiments with animals. His work with rats demonstrated among other things the function of vitamin A and especially the importance of vitamin D in rickets. Thanks to Dr. McCollum and to many thousands of rats, which served what seems to be their one useful purpose, the cause of rickets was established. Once extremely prevalent, today the disease is a rarity where proper food and vitamins are available and used.

These men were true pioneers in establishing the knowledge of vitamin deficiency as a cause of disease and providing necessary curative material. While other observers had shown much earlier that diseases such as scurvy were due to lack of certain kinds of food, it remained for them to demonstrate scientifically the facts upon which much of our knowledge of nutrition rests.

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50 YEARS AGO

The Journal of the South Carolina Medical Association

January 1918

The Committee on the Scientific Program was elected by the House of Delegates. The Association was still collecting small sums to pay for the Norwood Memorial Monument which had been put in place (a stone to Wesley C. Norwood in Abbeville.)

The Journal carried a roster of members of the Association.

Dr. Tyler's Private Hospital for surgical patients in Greenville was advertised. The Medical College also advertised its "fine new three story building".

THE OSTEOPATHIC PROBLEM

M. L. MEADORS

The principal legislative problem and, in fact, the only one of serious concern in the past few years has resulted from the repeated efforts by the osteopaths to have the South Carolina General Assembly extend the scope of their license to practice. For ten years or more, each Session has had before it for consideration Bills with this general purpose. The few (about six) osteopaths in the State have had the active assistance of the American Osteopathic Association which, on two occasions, has had is chief counsel from the Chicago headquarters to testify before a legislative committee—once in the Senate and once in the House. The most active advocate for the position of the osteopaths has been Dr. E. A. Johnson, of Summerville, Secretary-Treasurer of the State Board of Osteopathic Examiners. Dr. Johnson is a former resident of Philadelphia and a graduate of the osteopathic college there where he was engaged in practice for some time. He is a genial, pleasant, able man and a tireless worker in his efforts to convince the Legislators to his point of view. In many cases he has been successful.

Despite the efforts of the American Osteopathic Association and Dr. Johnson, and also in spite of the able assistance given them by some of the leaders in the General Assembly, so far their efforts have been unsuccessful although there is no question about the fact that they have gained considerable strength over the past few years. Having failed in the previous General Assembly to get their Bill considered on the floor of the House in which it had been introduced, friends of the osteopaths early in the 1967 Session presented three Bills—H. 1116, H. 1117 and H. 1118. H. 1116 would have added the osteopaths to the limited categories (physicians, dentists and veterinarians) who are authorized to prescribe and administer antibiotics, narcotics and other dangerous drugs. H. 1117 would have redefined the practice of osteopathy, so as to make it all inclusive, giving to the osteopaths the right to perform surgery and to practice medicine generally to the same extent as the M. D.'s but would have continued to designate them as osteopaths or doctors of osteopathy. The third Bill, H. 1118 would have changed the Medical Practice Act by adding an osteopath to the State Board of Medical Examiners and requiring all new applicants for license in South Carolina in osteopathy to take the same board examination as applicants for medical license and, in addition, an examination in osteopathy by the osteopathic member. All of the Bills were referred to the House Committee on Military, Public and Municipal Affairs. At the request of the Association, a public hearing was held and shortly thereafter all three Bills were reported out favorably with, however, a minority unfavorable report. There followed what must be a unique situation in the annals of legislative history. When the three Bills were reached on the Calendar of the House, and despite the fact that opponents were alert and prepared to oppose them, they were called for consideration and disposed of in such rapid fire succession that even the proponents of the Bills had no opportunity to speak on them. Within a few minues, however, and as soon as recognition could be obtained from the Speaker, motions were made and readily adopted for reconsideration of the vote whereby each of the Bills had just been passed on second reading. Each of them was then taken up in order and on that or the next legislative day, were defeated by a majority of approximately two to one. (A recent account appearing in some of the newspapers of the State to the effect that the Bills had been defeated by only a one vote margin was in error.)

No further effort was made to pass on Osteopathic Bill at that Session but the

House Committee on Military, Public and Municipal Affairs introduced a Concurrent Resolution, which we did not oppose and which was adopted by both Houses, providing for a Committee to study the need and advisability of extending the scope of the license in osteopathy.

The Resolution provided for a committee of nine—including the President of the Medical College of South Carolina, the President of the S. C. Medical Association and the President of the S. C. Osteopathic Association, three from the House of Representatives to be appointed by the Speaker, and three from the Senate to be appointed by the President of the Senate. Those appointed by the Speaker of the House were Representatives James Cuttino, Jr., Sumter; Robert W. Turner, Charleston; and Robert L. Watkins, Greenville; and from the Senate, Senators Snead Schumacher, Oconee; William J. Brockington, Richland; and Frank L. Roddey, Lancaster. These, together with Dr. William M. McCord, Dr. Norman O. Eaddy and Dr. E. A. Johnson, held an organizational meeting in September and decided to visit one of the osteopathic schools—that in Philadelphia—to investigate its facilities and scope of education and training. The Resolution provided an appropriation of $2,500.00 to cover expenses and that the Committee report back to the General Assembly not later than February 1, 1968.

The Committee, we are informed, made the trip to Philadelphia in November and spent two or three days looking over the Philadelphia College of Osteopathy. Their report will be awaited with interest. Whatever it contains, we can look forward with certainty to a renewal early in the 1968 Session of the effort on the part of the osteopaths and their friends; and it will be no doubt more vigorous and stronger than anything that has been presented so far.

The position of the South Carolina Medical Association, through its Council and House of Delegates, has been and remains, that only those persons should be licensed to practice medicine who, not only pass satisfactorily the Board of State Medical Examiners but also who are graduates of accredited medical schools. We have consistently maintained that if the osteopathic schools are as good as their friends claim and can be shown to be so by examination and accreditation by the same group which is charged with the accreditation of the Medical College of South Carolina, that their applicants should be examined and upon passing the examination satisfactorily, admitted to the practice of medicine. There is not now and has not been at any time any disposition on the part of the S. C. Medical Association to bar from practice persons who can be shown to be properly qualified but it is the Association's position further that there should not be two standards of qualification for persons in the State—one for the graduates of duly accredited medical schools and another for the graduates of schools not so accredited.

We fully expect that much will be said and written on the subject during the coming Session of the Legislature. It is hoped that all members of the Association will keep up with the developments as they occur and will bear in mind the need for their cooperation if the Association's position is to be maintained.

M. L. M.

STATEMENT ON ALCOHOLISM S.C.M.A.

The following statement and recommendations, prepared and recommended by the Association's Committee on Alcoholism, was endorsed by Council at its meeting Oct. 25, with the understanding that it be submitted to the members of the House prior to public announcement or publication in the Journal.

The House of Delegates of the American Medical Association in 1958 made the statement that alcoholism is an illness, therefore the concern and responsibility for managing this problem falls well within the purview of the medical profession.

It is recognized that the course of this illness is

marked by gradual deterioration in the psychosocial structure of the individual as well as the eventual deterioration of his physical health. Whereas attention has been devoted in our past medical education to the recognition of organ system disturbances and changes as a result of chronic alcoholism, less direct approaches have been made to teach early recognition of the illness and to acquaint physicians with available modalities of treatment.

There is a paucity of physicians showing and taking an active interest in the alcoholism problem. The limited number of treatment facilities primarily oriented to the treatment and rehabilitation of the alcoholic should be of primary concern to us. The "semi-closed door" policy of alcoholic admissions to the general hospital and to psychiatric facilities along with the failure of insurance companies to recognize alcoholism as a primary diagnosis should become our concern. The long held punitive means of handling the chronic drunken offender has been struck down by the courts in the Driver-Easter Decision as being a travesty to our humanity. It behooves us to take a lead in recommending alternatives to the jailing of the chronic drunken offender. There is a need for involuntary admission laws to commit to therapy those who will not voluntarily submit to treatment, but meet the criteria of such a law. Your Committee on Drug Addiction and Alcoholism feels that the greatest priority of the above mentioned items lies in the area of involuntary treatment.

Preface to Recommendation on Involuntary Admission

From the standpoint of the law, involuntary commitment of the alcoholic without justifiable reason is not in keeping with his Constitutional rights. The Eighth Amendment of the Constitution prohibits "cruel and unusual" punishment, thereby preventing government from imposing punishment that is less than the dignity of man.

Historically, the medical profession has always honored and protected the right of the mentally competent patient to choose or reject treatment. We still concur with this concept and would emphasize the approach of persuasion and motivation in bringing most alcoholics to treatment.

The role of the physician in aiding in the protection of the individual and his family during the crisis of his illness is of great importance. We cannot abdicate the responsibility of such commitment completely to the courts or to any social service group, not medically oriented, that may involve itself in the care of the alcoholic.

We feel that such involuntary measures should be initiated by the family or the courts and only after two physicians agree, or in emergency situations upon the individual by handling such admissions except where a higher Court order is not withstanding.

The areas in which we feel that involuntary commitment would be both humane and necessary are as follows:

1. When an alcoholic demonstrates a pattern of behavior caused by his intoxication that directly and substantially endangers the safety of other persons. Comment—There must be a strong likelihood of real danger rather than obnoxious, irritating behavior or imagined or speculative possibilities of injury.

2. When one becomes so debilitated by alcohol consumption that he is in danger of dying and unable to make a rational choice as to treatment, then involuntary admission is considered justifiable.

3. The alcoholic who is mentally incompetent can be admitted under existing mental health laws. As a matter of fact, approximately 20% of patients at our State Mental Health facility have a diagnosis of alcoholism. We must not overlook the area of voluntary admission and our position of responsibility in acting oftentimes as the catalyst to bring this about. While those involuntarily admitted are being detoxified, efforts toward voluntary admission should be of primary concern. A Boston study indicates that at least 80% of such patients will submit to voluntary treatment.

Voluntary admission should be available to anyone who has reason to believe he is suffering from this illness after proper preliminary evaluation by the treatment facility staff.

It should be the intention of the commitment procedures to minimize the length of such involuntary detention. No commitment in a central in-patient institution should be for less than 10 days or more than three months. There should be enough flexibility in the law to meet the needs of the individuals as determined by the institutional staff.

Definition of "Chronic Alcoholic": The term "Chronic Alcoholic" means any person whose dependence on alcoholic beverages is addictive to the extent that he shows noticeable injury to his physical or mental health or it interferes with his smooth social or economic functioning, or to the extent that he has lost the power of self control with respect to the use of such beverages.

MEDICAL ETV

Thursday, January 18 from 8 to 9 p.m. from the UCLA School of Medicine: LSD: Problems and Prospects. Can be viewed over Channel 7 in Charleston, Channel 35 in Columbia, 29 in Greenville, 14 in Barnwell-Allendale area and 33 in Florence.

TITLE XIX IN SOUTH CAROLINA

The matter of implementing Title XIX "Medicaid" program in South Carolina was bypassed by the 1967 Legislature on the premise that no further appropriation would be required by the Deparment of Public Welfare in order to carry out basic requirements for Welfare Department recipients.

Consequently it behooves all of us to inform our legislators of our feelings regarding this program in the months ahead of us. Enabling legislation will surely come before the 1968 session.

In summary the program is a joint State-Federal health venture, of Kerr-Mills form, which will provide payment for *all medical services* to "medically indigent" individuals. It will eventually replace all Federal aid type programs for the State such as Crippled Children's Program, Rheumatic Fever Programs, etc. Since Federal funds compose approximately 82% of the budget, it is quite unlikely that our State Legislature will not pass the necessary measures.

At the moment, the Department of Public Welfare is "in charge" and they have responded very reluctantly to offers of help in planning the legislation. These offers have come from South Carolina Medical Association, various State groups (pediatricians, general practitioners) and particularly from Dr. Kenneth Aycock, our State Health Officer. It is here that we feel our efforts should be concentrated—that is, the support of individual legislators should be sought in specifying that *the State Board of Health be responsible for the medical care aspects of Title XIX.*

Specifically this should include the following:

1. Standards of care.
2. Adherence to rules re standards.
3. Review of local plans, certifying them to Department of Public Welfare.
4. Audit quality and availability.
5. Advise Department of Public Welfare re appeals.
6. Planning.
7. Hospital certification.
8. Rates of payment.
9. Methods of control and utilization.
10. Use of Advisory Board from South Carolina Medical Association.

These are *medical*, not *social* or *welfare* matters and should be directly controlled by a medical organization. Our State Board of Health is experienced, qualified and organized for the task. They have the support and confidence of the individual physicians who must deliver the care. It is not likely that such trust will prevail between the doctors and the Department of Public Welfare, whose task should be overall planning, organization and certification of qualification of the *patient* for the program—not the *doctor*.

Present contract proposals between the Department of Public Welfare and State Board of Health are, in my opinion, altogether inadequate, and give only token responsibility for participation by the Board and its representatives. Consultative and advisory services, with no real authority are provided.

These facts must be brought to the attention of lawmakers before it is too late. See your own local Representatives and Senators—talk to them, write them. Pass the word to your medical colleagues. Inform yourself of the far-reaching implications of this program—we have time to get it done.

William R. DeLoache, M.D., Chairman
Committee on Pediatric Practice
South Carolina Chapter,
American Academy of Pediatrics

STATE BOARD OF HEALTH
REGIONAL RURAL COMMUNITY HEALTH PROGRAM

E. KENNETH AYCOCK, M.D.
State Health Officer

The counties of Allendale, Hampton, Colleton, Jasper, and Beaufort have been selected for a special regional health program for rural communities, and planning for this program will begin soon.

This region was chosen after considering the population density and four indices of health need, i.e., infant death rate, crude death rate, tuberculosis case rate, and percent of inadequate dwellings. Selection was based on evidence of health needs, low population density, lack of other major health efforts, and community willingness to have such a project.

The objective of the project will be to assure greater accessibility to unified modern health care for rural people and their communities through more effective planning for health services, adaptation, provision, and communications. The term "health care" encompasses services promoting physical, mental, and social well-being as well as treating illness or injury.

The task ahead is to plan a practical method of providing comprehensive health services to rural people and to develop and test a new system for meeting rural health needs.

Plans call for the employment of a local person to serve as a rural community health development worker such as a public health nurse, an environmental sanitarian, a social worker, a teacher, or other qualified person. This worker will be an intermediary with others already in the field, such as the medical association, voluntary agencies, the Welfare Department, Agricultural Extension Service, agriculture, and farmers' organizations. He will work under the administration of Dr. Parker Jones and a medical advisory group made up of local physicians.

He will bring together a variety of groups, public and private, with a mutual interest and concern in the field of rural health. He will bring interested local people and groups together in an effective planning effort to identify and document health needs and problems, set priorities, and develop plans to improve the health of the community. He will assist local groups in identifying and mobilizing resources actually and potentially available and put the local groups in touch with resources that can be brought to bear on local problems as needed, tailor-made to fit the local people and their situation.

Local participation and local decision-making will be emphasized. We feel that the people must be involved at a community level in the development of these services under the guidance of the local medical profession. Neighbor-to-neighbor communication—people talking with their peers—is needed.

Funds to support this health planning program will be secured under the Regional Rural Community Health Demonstration Program and the Comprehensive Health Planning Act (Public Law 89-749).

The interests and program resources of nine federal agencies will be concerted to develop an excellent locally designed health program in this rural area where such services at present do not exist or are not adequately developed.

A national rural health task force composed of members of these nine federal agencies selected South Carolina, along with Maine and Colorado, as a site for this project. These pilot projects will develop, test in actual opertion, and evaluate practical methods of providing comprehensive health services in rural life and work settings.

We at the Board of Health are grateful to have been chosen. Our health needs are great; help lent under proper medical direction and supervision will go a long way in improving the total health of the people of this state.

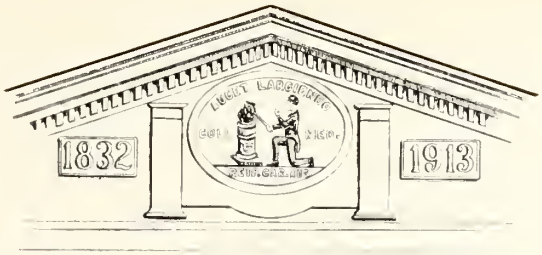


Dr. Robert E. Bell Jr., child psychiatrist, and **Dr. Joseph W. Taber Jr.**, neurologist, have been certified by the American Board of Psychiatry and Neurology. Newly elected officers of the Greenville County Medical Society include **Dr. Frank H. Stelling**, president; **Dr. W. R. Craig**, president-elect; **Dr. W. Marion Waters**, secretary; and **Dr. Lucius Cline**, treasurer. A native of Rock Hill, **Dr. John May Fewell**, practicing physician in Greenville for the past 27 years, was given a surprise testimonial dinner in December. **Dr. Thomas G. Abell**, a native of Chester, has opened office for the practice of family medicine in his home at 151 Lancaster St., Chester. He was graduated from the University of North Carolina and from the Medical College of South Carolina. He served his internship at the Henry Ford Hospital in Detroit, two years active duty in the U. S. Navy, and one year as resident physician in general practice at the Lima Memorial Hospital in Lima, Ohio before entering private practice in Raymond, N. H.

Dr. Asbury C. Bozard of Manning was elected to succeed **Dr. J. A. White** of Easley as president of the South Carolina chapter of the American Acadmy of General Practice. The election took place at the chapter's annual meeting this fall. **Dr. H. M. Stone** of Chester was named president-elect; **Dr. William J. Bannen Jr.** of Simpsonville, vice president; **Dr. Ira B. Horton** of Orangeburg, secretary. **Dr. Rufus H. Cain** of Dillon was re-elected treasurer. New district directors are **Dr. Robert E. Holman** of Elloree, **Dr. Max Clup** of Fort Mill and **Dr. Robert E. Quinn** of Georgetown. **Dr. Curtis P. Artz**, professor and chairman of the Department of Surgery at the Medical College of S. C., has been elected the first prsident of the newly organized American Burn Assn. **Dr. Joseph W. Hollison** of Easley has been awarded the $1,000 Palmedico Award by the S. C. Chapter of the American Academy of General Practice .**Dr. James A. Hayne** of Hampton recently was a guest of the Navy for a cruise in the submarine tender USS Howard W. Gilmore from Charleston to Fort Lauderdale. Dr. James Morris of Duke University and **Dr. Ambrose G. Hampton** of Columbia gave lectures during a training course in November at the Columbia Hospital on teaching emergency measures for dealing with heart attack victims. At the annual meeting of the Medical-Surgical Staff of Roper Hospital in Charleston **Dr. Julian Buxton** was elected president and **Dr. I. Ray Ivester**, vice-president.

Classified Advertisement

PSYCHIATRIC RESIDENCIES FOR G.P.'s.
NIMH residency training in approved three year program. Stipend $11,500 to $12,000. Applicants must have completed four years or more of practice in field of medicine other than psychiatry after an approved internship. Applicants should not be over 45. Address inquiries to Chairman, Department of Psychiatry, Medical College of Virginia, Richmond, Virginia 23219. Include curriculum vitae and recent photograph.



Medical College of South Carolina

Dr. O. Charles Mitchell served as Visiting Professor of Neurological Surgery at the Medical College of Ga. in Augusta, Dec. 15-17.

Dr. William Dougherty presented a lecture on "Ultrastructural Localization of Acid Mucosubstances in Rabbit, Chicken and Frog Skeletal Muscles" at the 7th annual meeting of the American Society for Cell Biology, which met in Denver, Colo., Nov. 13-15.

Dr. William Mylin presented a paper on "Modern Concepts of Unilateral Cleft Lip and Palate Treatment" at the meeting of the Southern Medical Assn. in Miami, Nov. 13-16.

Dr. Curtis Artz attended the First Biennial Symposium on the Management of Trauma and Disaster Medical Problems (AMA) where he lectured and moderated a panel on "Burns" at Miami Beach, Nov. 10-11.

Drs. William H. Lee, Jr., Noman Cooper and **Jack Arrants** attended the Southern Thoracic Surgical Assn. meeting in Dallas, Tex., Nov. 10-11. Dr. Lee presented "The Effect of Prolonged Cardiopulmonary Bypass (2 to 4 hours) upon Lung Function and Respiratory Work" by Lee, Cooper, Murner, Matsuura, and Najib.

The Medical College's Dept. of Medicine will present a Postgraduate Seminar on Internal Medicine for Internists and General Practitioners in the Medical College Hospital amphitheater from 12:30 p.m. on Feb. 8 through afternoon sessions on Feb. 9.

This is the first in a series of seminars planned by the Dept. of Medicine. Members of the Medicine faculty will conduct the program. Some sixteen subjects will be presented and discussed during the two-day meeting. Presentations are designed so that all subjects will be presented in some depth, but no particular disease or subspecialty will be covered comprehensively. Diagnosis and management will be emphasized, and time will be arranged to allow for audience participation and questions.

Invitations have been sent to Medical College School of Medicine alumni and to other physicians in the state.

Dr. Forde McIver presented a talk before the Coastal Carolina Medical Society, Nov. 15, on "Developing a Medical Program."

MEETINGS

The Council on Medical Service and the Division of Socio-Economic Activities of the American Medical Association will sponsor the Second National Congress on Socio-Economics of Health Care on March 22-23, 1968 at the Palmer House in Chicago.

The Congress will bring together authorities from medicine, health care administration, social science, education, community planning and other disciplines to report on new developments and techniques in meeting the increased demand for health services.

BLUE CROSS - BLUE SHIELD OF SOUTH CAROLINA

Medical Review Committee Established

In order that South Carolina physicians may be assured of obtaining maximum consideration from Blue Cross-Blue Shield for themselves and their patients, a new committee has been formed. This committee, the Medical Review Committee of Blue Cross-Blue Shield of South Carolina, reviews problem cases and makes recommendations to your Blue Cross-Blue Shield Plans.

Prior to the establishment of this Committee, Dr. Charles J. Lemmon, our Medical Director, reviewed all non-routine Blue Shield cases and informally referred those that he could not resolve to other doctors in involved specialties, to SCMA approved Utilization Committees, the SCMA Mediation Committee or the Central Professional Services Committee of the Blue Shield Board. Obviously, the increased volume of claims due to Plan membership growth and Medicare resulted in this system becoming increasingly complex.

The Committee was carefully selected to create a committee of outstanding physicians broadly representative of the various specialties. Members of the Committee are:

Specialty Represented

SURGERY
C. B. Hanna, M.D., Spartanburg, S. C.
J. H. Young, M.D., Anderson, S. C.

INTERNAL MEDICINE
A. I. Josey, M.D., Columbia, S. C.

ORTHOPEDICS
S. E. Izard, M.D., Charleston, S. C.

OPH. & OTO.
R. E. Livingston, Jr., M.D., Newberry, S. C.

OB-GYN
T. C. Stoudemayer, M.D., Greenville, S. C.

GENERAL PRACTICE
S. O. Cantey, Jr., M.D., Marion, S. C.

Annual Meeting

South Carolina County Medical Society Officials and Other Interested Physicians

Wade Hampton Hotel, Columbia, S. C.

Sunday, February 18, 1967

Tentative Program Includes Discussions On Administration of Title XIX; the Heart, Stroke and Cancer Program; Health Insurance (H.E.W.) and other Federal Programs.

Meeting Sponsored by the Public Relations Committee of the South Carolina Medical Association

Luncheon as guests of the Association

Please notify Mr. M. L. Meadors, 301 North Coit St., Florence, S. S. 29501 if you plan to attend.

South Carolina Regional Medical Program — Progress Report

South Carolina's hospital facilities and recognized needs for patients with heart disease, cancer, and stroke have been the principle concern of the South Carolina Regional Medical Program in recent months. A supplemental planning grant, awarded in September, permitted expansion of the program staff at the Medical College of South Carolina. Staff members have visited hospitals of all sizes throughout the State to gather preliminary information about available diagnostic and treatment facilities, educational programs, and paramedical services. This information became the subject of discussion for a series of planning study groups which met in Columbia during the week of November 27th. Each study group discussed policies and priorities in a specific aspect of the Regional Program under the following headings:

1. Continuing Education for Physicians
2. Role of Community Hospitals
3. Heart Disease and Stroke
4. Cancer
5. Allied Health Professions

Each group consisted of fourteen to eighteen members who were chosen from nominations made by the members of the statewide Regional Advisory Group. The discussions were highly productive and provided a basis for the future progress of the Program and for the first operational grant application to be submitted early in 1968.

The recommendations of the study groups were very broad in scope. They included direct emphasis on the need to make information readily available to the family physician, whose time is overwhelmingly consumed by the demands of his practice. The study group on community hospitals proposed a pilot project that would explore effective ways in which hospitals in the same geographic area can work together in a specific cooperative project. A stroke program that would incorporate diagnostic and treatment facilities and rehabilitation services was considered most appropriate for such an undertaking. The study group on heart disease gave highest priority to the training of nurses for coronary care units through cooperative arrangements. The study group on cancer emphasized the role of the state cancer clinics, which might well be expanded with Regional Program support. The principle project recommended by the study group on Allied Health Sciences was additional support for the Health Education and Recruitment Project of the South Carolina Hospital Association.

A first step has been taken in developing the regional plan. Many problems remain. The South Carolina Regional Medical Program can succeed only with the interest and support of physicians throughout the state.

MEETINGS

The following postgraduate courses in pediatrics have been arranged under the sponsorship of the American Academy of Pediatrics through its Committee on Medical Education.

Behavioral and Emotional Disorders in Children—April 23, 24 and 25 at the University of Chicago, Chicago, Ill.

Pediatric Hematology and Oncology—May 23, 24, and 25 at the University of Virginia School of Medicine, Charlottesville, Va.

Direct inquiries to: Dr. Gerald E. Hughes, P. O. Box 1034, Evanston, Ill. 60204.

* * *

The 14th annual combined sectional meeting for doctors and nurses sponsored by the American College of Surgeons will be held in Williamsburg, Va. March 11-13.

For more information write: Mr. T. E. McGinnis, American College of Surgeons, 55 East Erie St., Chicago, Ill. 60611.

MEDICAL CARE FORCES MUST BE UNITED

WILLIAM T. LESLIE, M.D.
Director, Health Insurance Program
South Carolina State Board of Health

Recent federal legislation makes possible exciting changes in the level of medical care available to meet the needs of the elderly patients in South Carolina. Whether or not these elderly patients will reap the rewards of this legislation will depend in part on what we and other professionals in the health care field are able to do in implementing positive steps.

As the medical profession and health institutions qualify under the conditions of participation, reimbursement for good medical care should become increasingly available. This major obstacle, on which we have long placed the responsibility for poor care, is in the process of being removed. The question now becomes whether or not all professional people pick up the challenge and create an imaginative and positive approach toward meeting the real needs of the elderly and chronically ill patients.

On July 1, 1966, the Health Insurance Program for the Aged under the Social Security Act became operational in South Carolina. This program helps to close a major gap in the economic security of the elderly by providing protection against the cost of hospital and medical care. This program will have a significant impact on the organization, provision, and financing of health and medical care in South Carolina.

Your State Board of Health in 1965 recognized its responsibility when the Health Insurance Program for the Aged was passed. The task of evaluating the hospitals, nursing homes, and home health services was begun. A task of this magnitude presents problems which will be difficult to solve and requires diligent effort by trained personnel. The United States Public Health Service employed specialists to write the conditions of participation on a national basis. Obviously, they could not be applied to South Carolina in an undiluted manner. The State Board of Health has been able to recommend certification of 66 of our 107 hospitals which provide 80% of the available short term hospital beds. Of the 89 licensed nursing homes in South Carolina, 52 have been able to upgrade services to a degree that enabled us to recommend their certification to the Social Security Administration. Home Health Services in South Carolina were non-existant as such but the Assistant State Health Officer, Dr. Malcolm U. Dantzler, has worked diligently to create Home Health Service agencies, using the framework of the county health departments. All departments of the State Board of Health have given untiringly of their time and skills. Twenty seven people have been working full time or part time in this program.

The Health Insurance Program for the Aged has introduced two new medical facilities to treat the over sixty-five patient. The extended care facility has been created to provide a relief for hospital admissions. Nursing homes have upgraded their medical care so that the patient can receive his acute medical treatment in the hospital and then be transferred to the extended care facility to complete his convalescence. Reliable research has shown that thirty to forty per cent of the hospital patients can be treated adequately in an extended care institution, relieving acute hospital beds and financial burdens on these patients. This is also needed by the under sixty-five year old patient. Home health services in South Carolina have not been utilized to the extent that this program envisions. Utilization review committees are urged to promote placement of the patient at the level of medical care

designed to treat his disease most efficiently. We cannot continue to promulgate the idea that the hospital is the only place for the sick and injured. We know that unless an appropriate plan is made, the patient may return to the hospital in a state of relapse. The patient suffers, hospital pressure is increased, and the cost is escalated. Proper medical judgment will allow us to place the patient in that institution which can treat his disease or injury. This program is designed to rehabilitate the patient to his home environment. We all recognize that the home environment allows the individual to retain his dignity, usefulness, and happiness to a greater degree.

Although it is too early to appraise the effects of the Health Insurance Program, nevertheless experience in this short period suggests some possible results pointing to future accomplishments.

The increase in utilization of health services by the elderly, particularly in the area of inpatient hospital care, is about eight per cent. This represents people who might otherwise have postponed important and necessary medical care, and is one of the more obvious immediate benefits of the program.

In addition to increased utilization, with the advent of Medicare, a greater variety of health services became available to the elderly on an insured basis. Prior to Medicare, extended care services, home health services, and physicians' services, other than in the hospital, were rarely available to the elderly under private insurance coverage readily available even for those under sixty-five.

The increased variety of insured health services will have beneficial effects on the utilization of institutional services by permitting the consideration of alternative levels of care with less concern for their financial effect on the patient. Moreover, it will tend to make medical care more responsive to medical need inasmuch as a physician may select from many more available alternatives in responding to the specific needs of individual patients.

Apart from the financial assistance which Medicare provides when covered health services are received, one of the more certain effects of Medicare has been the sense of security which the assurance of such financial assistance gives to the elderly. Thus, when actual expenses are incurred, Medicare helps the elderly to avoid the severe financial effects which have so often required them to draw upon their savings or to request assistance from their families—or from society itself under various welfare provisions; but also, in a prospective sense, Medicare makes the elderly more secure by eliminating the fear which many of the elderly previously felt in anticipating the financial consequences of serious illness.

The prevention of disease is a well recognized field of medical endeavor. The economic and human costs of preventive measures are small when compared to the cost of treating the acutely ill patient.

The work to be performed in the years ahead will summon trained and skilled manpower in quantities—and quality—we have never needed before. But nowhere is the need for manpower greater, the accompanying challenge more critical, than in providing medical care to the beneficiaries of the Health Insurance Program. The treatment of Title XIX beneficiaries will also add to this workload when it becomes operational.

Your State Board of Health has been instrumental in stimulating training of medical personnel to a greater degree. We have received excellent cooperation from the Medical College of South Carolina, the University of South Carolina, and Winthrop College. The United States Public Health Service has made available grants to train 155 pharmacists to be consultants to small hospitals and extended care facilities. Fifty administrators have had a

three-day seminar at the University of South Carolina. Winthrop College conducted a training course for dietitians to upgrade dietary services. Communication lines are being established at all levels of medical care to better patient care. Medicine is a universal language, and provides immediate high impact communication within any culture, anywhere in the world. How do we measure the effects of these programs?

Unless the physician can gain some effective control over the personnel who assist him in the hospital, he stands to lose everything. Technology advances and the surgeon finds at his disposal complex instruments to help him to work such as: air drills, cardiac pacemakers, sophisticated skin graft machines and automatic stapling devices. The performance level of his medical assistants however is dropping, generally because of increased turnover of ancillary medical personnel and specifically because of poor training.

Thus we arrive at a critical moment of truth. We have a rising tide of public insistence upon better health protection. We have verbal expression of this insistence from the nation's highest executive leadership, and concrete legislative expressions of this from the nation's lawmakers: namely, Public Law 89-97 including Title XVIII and Title XIX, known as Medicare and Medicaid, Public Law 89-749, Comprehensive Medical Care, and Public Law 89-239 which is the heart, cancer, stroke and other related diseases law. These laws or expressions of national will have given us a powerful mandate, although at the present time they have provided us with a growing wealth of scattered and uncoordinated resources. Nevertheless with acute hospitals overworked, our responsibility for planning is increased. Our goals need to include appropriate planning for the patient as well as efficient and responsible use of facilities and time of health professionals. To accomplish these goals, all patients' specific needs must be matched with the program for which care is geared. If we satisfy ourselves with simply finding a vacant bed in a hospital or nursing home, we are following a dangerous practice.

The future of medical care demands broad national goals, universal access to high quality medical care, and the creation of an environment for healthful and productive living. Our objective now is to establish a coherent set of long range goals and aims for a State policy to maintain and improve the health of every person in the community in which we live. We need to develop combinations that will enable us to take full advantage of all these separate forces.

As you are keenly aware, the structure and function of the State Board of Health and its changing relationships with other health agencies and institutions make up only a part of the State's commitment to health. In fact, in recent years there has been a rapid and tangible growth of governmental programs at all levels directly or indirectly involved in the health of South Carolina.

The State Board of Health has been assigned the task of planning the comprehensive health system to provide services to every citizen in South Carolina on a regionalized health basis. Better planning and close cooperation among all agencies will be the solution for completing this plan.

In a single generation, the changing pattern of health has resulted in a spectacular decrease in the incidence of infectious diseases among the older population and a concurrent increase in the prevalence of chronic diseases.

Today people are living longer but only to be affected by chronic disease, disability, and physical impairment of old age. To prevent these conditions, little is available in the way of primary protection because there are no vaccines or miracle

drugs that will prevent chronic disease and resulting disabilities. We must, therefore, depend on secondary prevention which is an attempt to detect chronic disease in the earliest possible stage and to prevent progression and disability. This is especially important for chronic diseases that meet the three-fold public health criteria of being widespread, resulting in significant morbidity and mortality rates, and approachable on a community basis with reasonable expectation of favorable results. Often elderly people are affected with chronic diseases and disabilities that may have been in the stages of development for many years previous to the occurrence of the first clinical symptom.

The comprehensive periodic health examination has been generally accepted as the most effective measure of detecting disability in the asymptomatic stage, and yet, time, cost, and personnel shortage preclude the possibility of regular comprehensive physical examinations for the entire population. Too few people take the important safeguard of having a periodic physical examination. Frequently this is the fault of the patient. He may take the attitude that "it can't happen to me", or he may be reluctant about spending time and money for an examination. In some cases, the physician may be so occupied with curative medicine that he has neither the time nor inclination to practice preventive medicine.

Fulfillment of the various phases of health protection will then necessitate the combined efforts of physicians, hospital administrators, nurses, pharmacists, sociologists, economists, housing experts, and personnel of many other disciplines.

The adoption of Titles XVIII and XIX of the Social Security Act and acceptance of the heart disease, cancer, and stroke programs will result in an increased work load for the medical and allied professions. These added duties emphasize the need for teamwork, research into new methods, and evaluation of the present methods of total patient care.

The family physician will always be the most important member of the diagnostic team. He will require extra manpower. It is fair to assume that many of the technical diagnostic tasks can be performed by paramedical personnel.

A most important aspect of the problem involves secondary prevention of chronic diseases which constitute approximately 70 per cent of all the health problems of South Carolina.

Your State Board of Health under the direction of Dr. E. Kenneth Aycock is gathering information, statistics, and plans for South Carolina. These plans for solving our health problems are now being drafted. To advise and help, a twenty-five man comprehensive health planning advisory council has been appointed by Governor Robert E. McNair. The State of South Carolina will have better medical care when each person interested in medicine joins in this planning.

REFERENCES

1. Stewart, William H.: Partnership for planning, Partnership for Health 3:9, December 5-9, 1966.
2. Act of Congress, Congress of U. S. Public Law 89-97. Vol. 79, p. 286. July 30, 1965.
3. Act of Congress, Congress of U. S. Public Law 89-239. Vol. 79, p. 926, October 6, 1965.
4. Act of Congress, Congress of U. S. Public Law 89-749. Vol. 80, p. 1180, November 3, 1966.
5. Mattison, Berwyn F.: Comprehensive planning for health, Partnership for Health 10:16, December 5-9, 1966.

DEATH

Dr. Archie Cowan Watson

Dr. Archie C. Watson, 77, a retired physician, died Nov. 4 at his home in Greenville.

Dr. Watson was born at Mt. Carmel near Abbeville in 1890. He was graduated from Erskine College and the Medical College of S. C. He served his internship in Jacksonville, Fla. and entered the service during World War I as a captain in the Medical Corps of the U. S. Army. He began his practice in Greenville in 1919.

NEW MEMBERS

Dr. Joel B. Huneycutt
1120 Ebenezer Ave., Ext.
Rock Hill 29730

Dr. Thomas E. Breedin
1120 Ebenezer Ave., Ext.
Rock Hill 29730

Dr. James F. White
1639 Brabham Ave.
Columbia 29204

Dr. Lucius C. Pressley, Jr.
Wm. S. Hall Psych. Inst.
Columbia 29201

Dr. Margaret McCarthy
711 N. Church St.
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Dr. Laurie N. Smith
Mary Black Hosp.
Spartanburg

Dr. Marcelino I. Chaves
711 N. Church St.
Spartanburg 29303

Dr. John G. Gatgounis
71 Savannah Hwy.
Charleston 29407

Dr. Abram J. Richards, Jr.
2758 Laurel St.
Columbia 29204

Dr. Arthur A. Madden
1715 Providence Rd.
Columbia 29204

Postgraduate Seminar on Internal Medicine

for Internists and Family Physicians

This is the first of a series of Seminars planned by the Department of Medicine. The subjects presented will be studied in some depth, but no effort will be made to cover a particular disease or subspecialty comprehensively. Diagnosis and management will be emphasized, and there will be time for audience participation and questions.

Supper on the 8th of February and lunch on the 9th of February will be provided so that the time available can be utilized fully. Advance registration is requested so that plans for meals can be made.

All sessions will be held in the Amphitheater, Medical College Hospital. Registrants will receive parking permits by mail.

REGISTRATION: Address all correspondence to: Office of Development, Medical College of S. C., Charleston, S. C. 29401

FEE: $10.00. Make check payable to Medical College of S. C.

For full program see the December 1967 number of the Journal



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Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.

Overdosage: C.N.S. depression. Symptoms—Depression of respiration and of superficial and deep reflexes, slight constriction of the pupils (in severe poisoning, dilation), decreased urine formation, lowered body temperature, coma. Treatment—Symptomatic and supportive (gastric lavage; intravenous fluids; maintenance of blood pressure, body temperature, and adequate respiration). Dialysis may speed removal of barbiturates from body fluids.



Dosage: 50-200 mg. (¾-3 grains) at bedtime.

[031767]

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NEW SINGLE CHEMICALS

MINTEZOL

Anthelmintic Rx

Manufacturer: Merck Sharp & Dohme

Nonproprietary Name: Thiabendazole

Indications: Enterobiasis; intestinal parasitoses: Strongyloidiasis, Ascariasis, Uncinariasis, Trichchuriasis; cutaneous larva migrans; trichinosis.

Contraindications: None mentioned.

Dosage: Varies with the diagnosis, maximum recommended dose—3 Gm/day. Should be taken after meals.

DUPLICATE SINGLE PRODUCTS

DANTEN

Anticonvulsant Rx

Manufacturer: McKesson Laboratories

Nonproprietary Name: Diphenylhydantoin Sodium

Indications: Grand mal epilepsy and various lesser convulsive disorders other than the petit mal group.

Contraindications: Allergic phenomena such as fever and skin eruptions.

Dosage: Adults—100 to 200 mg, three times daily, with water. Children over 6 years—100 mk 3 to 4 times daily, with water. Children under 4 years—30 mg 2 to 4 times daily, with cream. All dosages must be individualized.

Supplied: Capsules—100 mg; bottles of 100 and 1000.

DRIZE 8 & 12

Antihistamine Rx

Manufacturer: B. F. Ascher & Co.

Nonproprietary Name: Chlorpheniramine maleate

Indications: Symptomatic relief of distress of allergy, as in urticaria, contact dermatitis, gastro-intestinal and upper respiratory tract allergies.

Contraindications: None mentioned.

Dosage: Adults and children over 12 years—one capsule morning and evening. Children 6-12 years—one Drize 8 capsule, once or twice daily. Not for children under 6 years.

Supplied: Sustained release capsules—8 and 12 mg; bottles of 100 and 500.

MENEST

Hormone—Estrogen Rx

Manufacturer: The S. E. Massengill Co.

Nonproprietary Name: Conjugated estrogens, equine.

Indications: Female—menopausal and postmenopausal syndromes; inoperable carcinoma in patients at least 5 years past menopause. Male—inoperable or advanced prostatic carcinoma.

Contraindications: Cancer of the breast or genitalia which might be stimulated by estrogens.

Dosage: Must be adjusted to individual needs.

Supplied: Tablets—1.25, 0.65 and 0.3 mg; bottles of 100.

NITROSPAN

Vasodilator—Coronary Rx

Manufacturer: USV Pharmaceutical Corp.

Nonproprietary Name: Nitroglycerin

Indications: For prophylactic use only in angina pectoris.

Contraindications: Idiosyncrasy to nitroglycerin and/or early myocardial infarction.

Dosage: One capsule at breakfast and at bedtime, at 12 hours interval.

Supplied: Sustained-release capsules 2.5 mg—bottles of 100.

PROZYME

Enzyme Rx

Manufacturer: Ulmer Pharmacal Co.

Nonproprietary Name: Proteolytic enzyme

Indications: For relief of pain associated with neuritis, herpes zoster and tabes dorsalis.

Contraindications: Previous history of allergic reaction to foreign protein. Not for i.v. use.

Dosage: Adults—1.3 cc i.m. daily for 2 to 5 days.

Supplied: Multiple dose vial—13 ml.

DUPLICATE SINGLE PRODUCTS

SULADRIN

Eye Preparation Rx

Manufacturer: Alcon Laboratories

Nonproprietary Name: Sulfisoxazole (as the diolamine salt)

Indications: Acute and chronic conjunctival infections susceptible to sulfonamide therapy and for prophylaxis to help provide a sterile field.

Contraindications: Known sulfonamide sensitivity.

Dosage: A small amount into conjunctival sac 3-4 times daily.

COMBINATION PRODUCTS

DRIZE M

Cold Preparation—General Rx

Manufacturer: B. F. Ascher & Co.

Composition:

Chlorpheniramine maleate	8 mg.
Phenylephrine HCl	20 mg.
Methscopolamine nitrate	2.5 mg.

Indications: Sinusitis, hay fever, allergic conjunctivitis, allergic rhinitis, common cold.

Contraindications: Pyloric obstruction, prostatic hypertorophy, intolerance to anticholinergic or an-

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Manufacturer: Central Pharmacal Co.

Composition:

Iron	50 mg.
Ascorbic acid	100 mg.
Sodium ascorbate	168.75 mg.

Indications: Uncomplicated iron deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Dosage: Adults—2 tablets once or twice daily. Children under 6 years—as directed by physician. Children over 6 years—1 or 2 tablets daily.

Supplied: Chewable tablets—bottles of 100.

SULADRIN

Eye Preparation Rx

Manufacturer: Alcon Laboratories

Composition:

Sulfisoxazole (as the diolamine salt)	4%
Phenylephrine HCl	0.12%

Indications: Acute and chronic conjunctival infections susceptible to sulfonamide therapy, and for prophylaxis to help provide a sterile field.

Contraindications: Known sulfonamide sensitivity.

Dosage: Two drops in eye every 2 to 4 hours.

Supplied: Ophthalmic solution—5 cc and 15 cc; glass dropper bottle.

ULGESTIN

Antihistamine Rx

Manufacturer: Ulmer Pharmacal Co.

Composition:

Atropine sulfate	0.2 mg.
Phenylpropanolamine HCl	12.5 mg.
Chlorpheniramine maleate	5.0 mg.

Indications: Temporary relief of allergic symptoms caused by upper respiratory infections including sinusitis and hay fever.

Contraindications: Use with extreme caution in patients with: hypertension, hyperthyroidism, organic heart disease, severe diabetes mellitus, glaucoma, asthma, prostatic hypertrophy, known sensitivity to any of the ingredients.

Dosage: 0.5 to 1 cc im or sc, followed by oral medication three or more hours later.

Supplied: Multiple dose vials—10 ml.

SEMINAR ON VIRUS DISEASES

Viral Diseases, which make up more than half of the infectious diseases of modern man, will be the subject of a 1-day seminar at the South Carolina State Board of Health and the South Carolina Chapter of the American Academy of Pediatrics meeting on January 19, 1968, from 9:30 a.m. until 4:00 p.m. in Columbia, South Carolina.

Presented by the South Carolina State Board of Health and the South Carolina Chapter of the American Academy of Pediatrics through the Seminar Services Program of the U. S. Public Health Service's National Communicable Disease Center in Atlanta, Georgia, the seminar is one of about 40 such programs being conducted in the United States. It will be held in the auditorium of the Sims Building in Columbia, South Carolina.

The seminar will provide an opportunity for practicing physicians in South Carolina to hear national and regional experts on viral diseases. They will discuss and illustrate basic concepts of viral infections, immunity, diagnosis, and clinical management.

Combined Abdomino-Lumbar Subcapsular Nephrectomy—F. C. Derrick, Jr., J. C. Hughes, III, K. M. Lynch, Jr. J Urol 96:635-639 (Nov.) 1966.

Secondary nephrectomy by any method is a difficult urological procedure. Subcapsular dissection or morcellation removal of the kidney is invariably involved with much blood loss.

We were confronted with a patient who needed a secondary nephrectomy after drainage of a perinephric abscess. She developed autoagglutinins and we could not match her for blood. An operation was devised to first ligate the renal artery and vein through an anterior, transabdominal approach, then remove the kidney via routine flank approach. This was done in the patient mentioned and two others, the nephrectomy being performed in a near bloodless field.



removes the mental blur

that clouds vision

SOLFOTON®

Each tablet or capsule contains

PHENOBARBITAL . . . . . 16 mg.
(Warning: may be habit forming)
BENSULFOID® (See P D R) .65 mg.
Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING WITHOUT PRESCRIPTION

AVAILABLE

Solfoton *(yellow, uncoated tablets "P")*
100s, 500s, 5000s

Solfoton Capsules *(yellow and brown)*
100s, 500s, 1000s

Solfoton S/C *(sugar-coated beige tablets)*
100s, 500s, 4000s

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856



treat one . . . six people benefit

The brunt of senility falls on the family as much as the patient. But usually within one or two days, 'Thorazine' can control senile anxiety and fear . . . dispel the confusion shown by nighttime wandering and chattering . . . restore appetite and interest in personal grooming. Treat the senile patient with 'Thorazine'—the whole family can benefit.

Before prescribing, see complete information, including adverse effects reported with phenothiazines and symptoms and treatment of overdosage, in SK&F literature or *PDR*. The following is a brief precautionary statement.

Contraindications: Comatose states or the presence of large amounts of C.N.S. depressants.

Precautions: Potentiation of C.N.S. depressants may occur (reduce dosage of such agents when used concomitantly). Use with caution in patients with chronic respiratory disorders. Antiemetic effect may mask overdosage of toxic drugs or obscure other conditions. Administer in pregnancy only when necessary. Because of possible drowsiness use cautiously and warn patients who operate vehicles or machinery.

Adverse Reactions: Drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; miosis; mild fever; weight gain; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosages (in rare instances, may persist); lactation and moderate breast engorgement (in females on high dosages); and less frequently, cholestatic jaundice (use cautiously in patients with liver disease). Adverse reactions occurring rarely, include: mydriasis; agranulocytosis; skin pigmentation; epithelial keratopathy; lenticular and corneal deposits (after prolonged substantial doses).

Available: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg.; Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg.; Injection, 25 mg./cc.; Syrup, 10 mg./5 cc.; Suppositories, 25 mg. and 100 mg.

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SK&F

in senile agitation . . . Thorazine® brand of chlorpromazine



t's be specific about Campbell's Soups... and *reducing diets*



There are more than 30 million people in America who are overweight. During the next year, you probably will see more than 1,000 of them in your own practice.

One good way to help these patients is to give them a reducing diet based on ordinary eating patterns.

Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



To obtain a supply for your office write to:
Campbell Soup Company, Box 265, Camden, N. J. 08101


HALT DIARRHEA!
SHERIFF

LOMOTIL®

TABLETS / LIQUID

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . . 2.5 mg.
(Warning: may be habit forming)
atropine sulfate . . . . . 0.025 mg.

lalts Diarrhea Promptly

in children with . . . Gastroenteritis ▪ Spastic bowel
Influenza-like infections ▪ Antibiotic-induced diarrhea

motil helps get children with diarrhea off toast and tea and back to normal
its and normal activity with gratifying dispatch. ▪ Lomotil lowers intestinal
otility and permits absorption of excess fluid. This usually controls diarrhea
mptly. ▪ Moreover, lowered intestinal motility achieved with Lomotil often
ieves the abdominal cramps and discomfort so distressing to children.

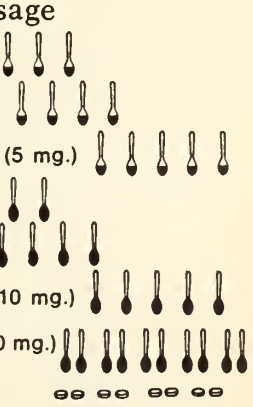
cautions: Lomotil is a Federally exempt
acotic preparation of very low addictive
ential. Recommended dosages should
be exceeded, and medication should be
t out of reach of children. Should acci-
tal overdosage occur signs may include
ere respiratory depression, flushing,
argy or coma, hypotonic reflexes, nys-
mus, pinpoint pupils, tachycardia;
tinuous observation is recommended.
notil should be used with caution in pa-
ts with impaired liver function or those
ing addicting drugs or barbiturates.

e Effects: Side effects are relatively un-
mmon but among those reported are
trointestinal irritation, sedation, dizzi-
s, cutaneous manifestations, rest-
sness, insomnia, numbness of the
remities, headache, blurring of vision,
lling of the gums, euphoria, depression
general malaise.

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

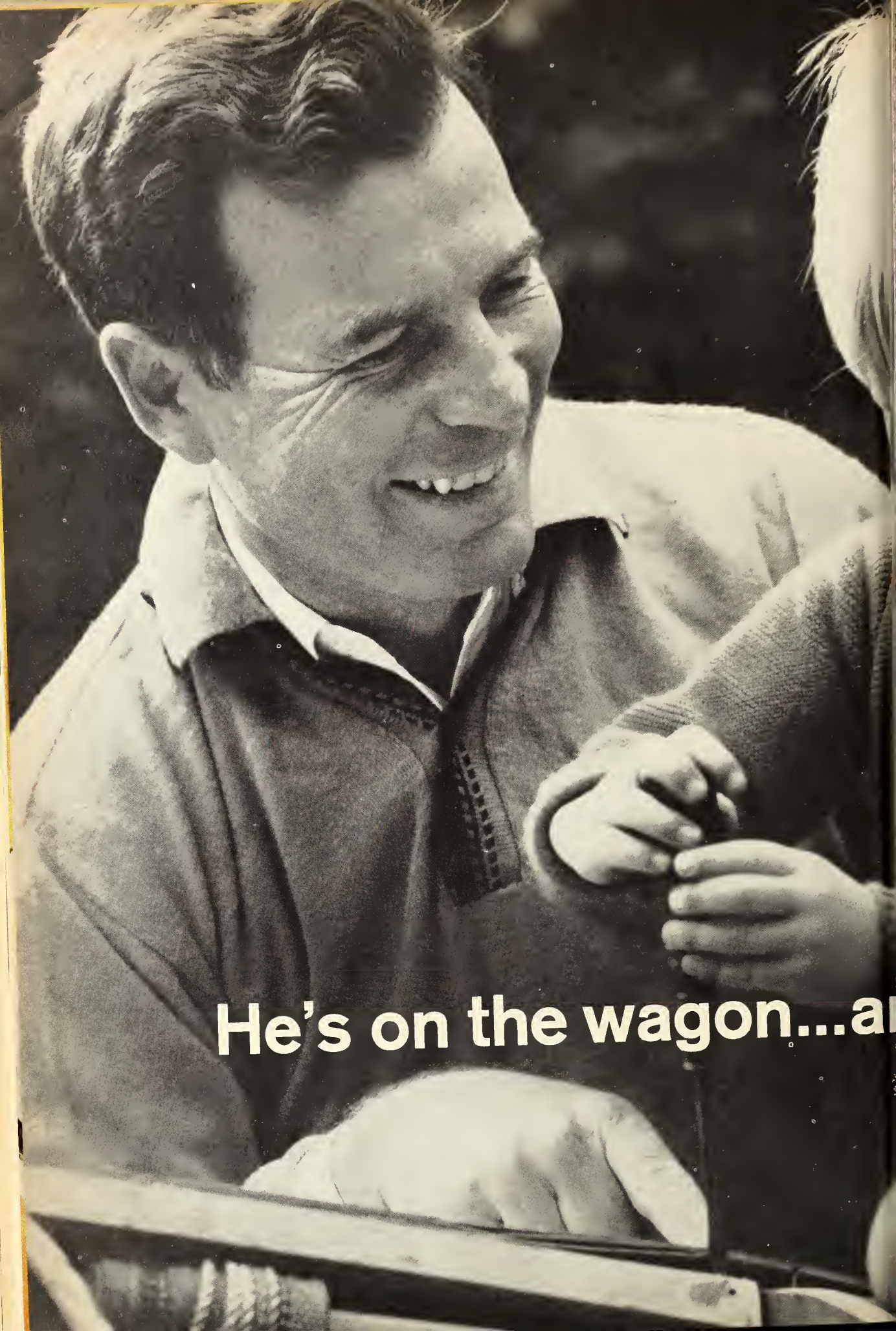
3-6 mo. . .½ tsp.* t.i.d. (3 mg.)
6-12 mo. .½ tsp. q.i.d. (4 mg.)
1-2 yr. . . .½ tsp. 5 times daily (5 mg.)
2-5 yr. . . .1 tsp. t.i.d. (6 mg.)
5-8 yr. . . .1 tsp. q.i.d. (8 mg.)
8-12 yr. . .1 tsp. 5 times daily (10 mg.)
Adults: . .2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.



*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

SEARLE *Research in the Service of Medicine*


He's on the wagon...a

w well does Vistaril relieve the symptoms that gue an alcoholic during the recovery period? ctors Knott and Beard of the Alcoholic Rehatation Unit, Tennessee Psychiatric Hospital l Institute, recently conducted a double-blind dy comparing Vistaril and another wellablished antianxiety agent with placebo in 60 onic alcoholic patients.[1]

e investigators conclude: "It was the opinion he staff that hydroxyzine was generally more ctive than chlordiazepoxide, for the follow- reasons: hydroxyzine was equally if not more ctive in reducing anxiety and tension and it duced less daytime sedation...."[1] (See results succeeding pages.)

e is new evidence that Vistaril can ease ten-, allay anxiety in chronic, hospitalized alcoc patients. *But you might also choose Vistaril what it doesn't do.* Although not evaluated in study, Vistaril is reported to be non-euphor-, and its low toxicity makes it relatively safe. t of all, Vistaril is non-habituating. To date, r more than ten years of clinical use, there e been no reports of dependency in patients iving Vistaril.

h Vistaril, it is as easy to p therapy as it is to start.

Vistaril®
HYDROXYZINE PAMOATE)

the study:[1] Sixty chronic alcoholic patients were hospitalized and randomly assigned to one of three oral double-blind treatment regimens for three weeks. Twenty patients received hydroxyzine (Vistaril®), 100 mg. q.i.d.; twenty others were given chlordiazepoxide, 25 mg. q.i.d.; and the remaining twenty received placebo capsules q.i.d. The capsule code was not made known until after completion of the study and analysis of the data. Response was measured with a modification of the Brief Psychiatric Rating Scale as originally outlined by Overall and Gorham.* Subjects were rated daily by trained staff members.

SYMPTOM RATING KEY

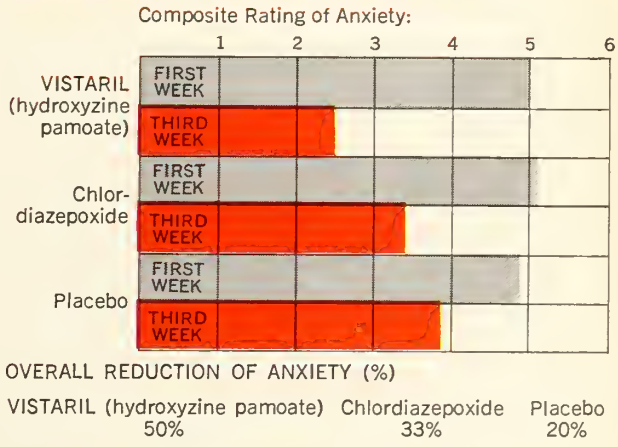
1=Not Present	4=Moderately Severe
2=Mild	5=Severe
3=Moderate	6=Extremely Severe

The figures which are given below represent the composite conclusions of the staff based on daily ratings during initial and final weeks of the study.

*Psychological Reports 10:799, 1962

the results[1] DURING FIRST WEEK DURING THIRD WEEK

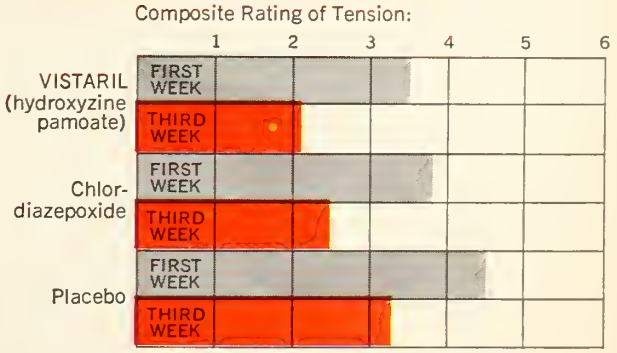
Anxiety reduced with Vistaril



OVERALL REDUCTION OF ANXIETY (%)

VISTARIL (hydroxyzine pamoate) 50% | Chlordiazepoxide 33% | Placebo 20%

Tension eased with Vistaril



OVERALL REDUCTION OF TENSION (%)

VISTARIL (hydroxyzine pamoate) 40% | Chlordiazepoxide 34% | Placebo 27%

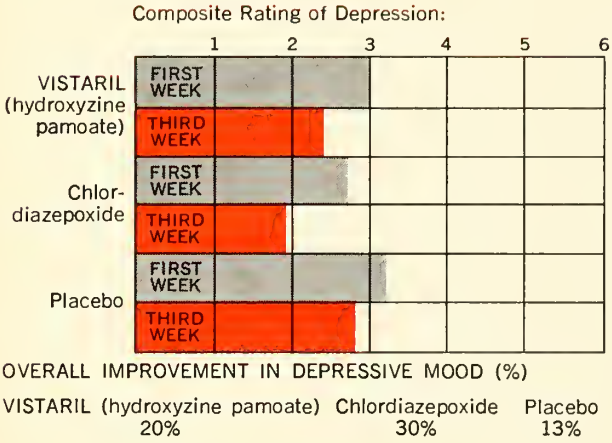
ESE SEE LAST PAGE FOR PRESCRIBING INFORMATION

In Alcoholism...

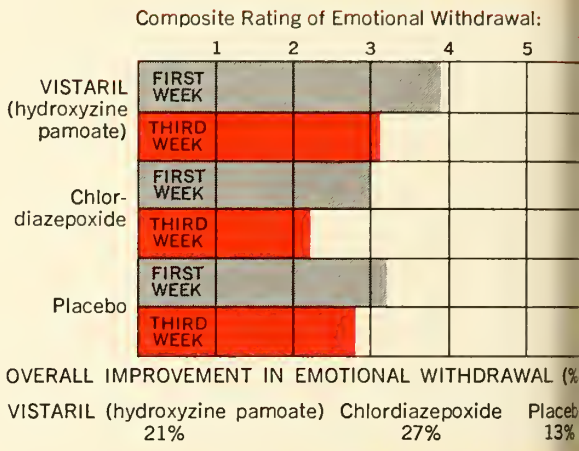
"Both hydroxyzine and chlordiazepoxide were generally more effective than the placebo. In some aspects, hydroxyzine was superior to chlordiazepoxide, which is currently the most frequently used psychotropic drug in the management of alcoholism."[1]

DURING FIRST WEEK DURING THIRD WEEK

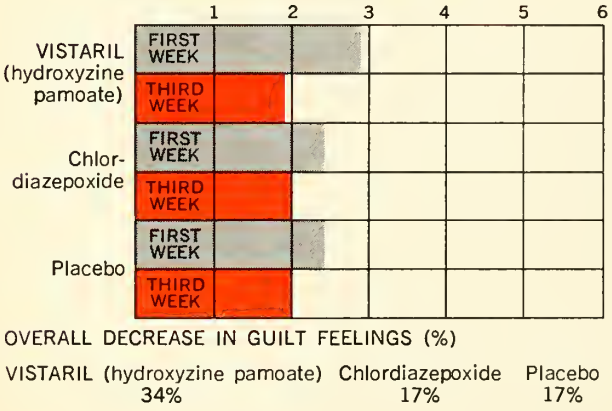
Depressive mood improved with chlordiazepoxide



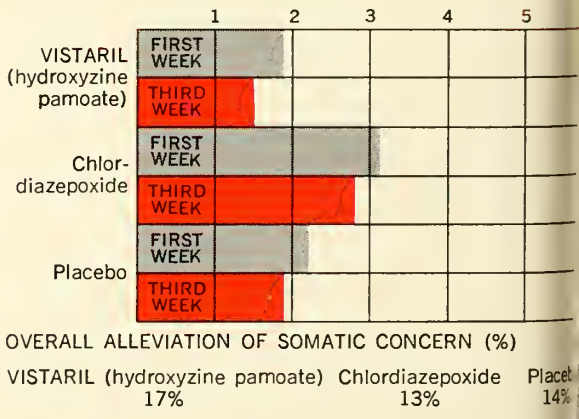
Emotional withdrawal counteracted with chlordiazepoxide



Guilt feelings allayed with Vistaril



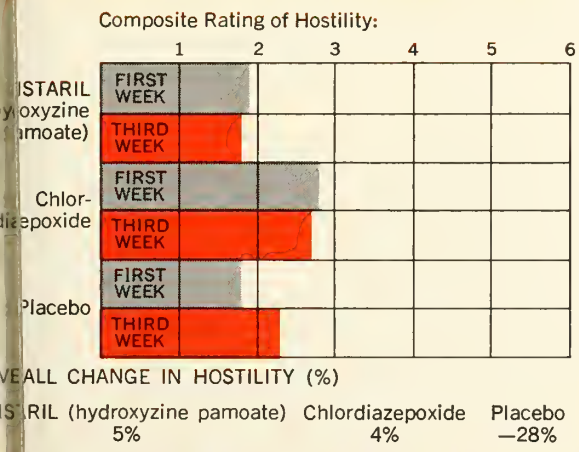
Somatic concern alleviated to minor degree in each group



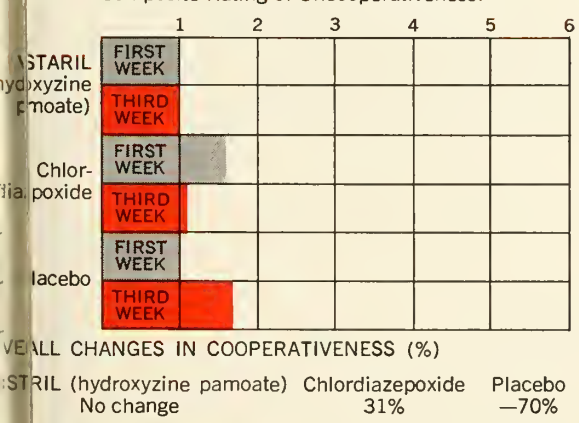
Less drowsiness with Vistaril

	Drowsiness	Dizziness	Mouth Dryness	Increased Motor Activity	Ataxia	Nausea	Comments
VISTARIL (hydroxyzine pamoate)	6 patients (mild)	3 patients (mild)	2 patients (moderate)	—	—	—	Side Effects Not Treated
Chlordiazepoxide	10 patients (severe in 6)	4 patients (mild)	—	1 patient (moderately severe in first week but gradually subsided)	—	—	Side Effects Not Treated
Placebo	2 patients (mild)	2 patients (mild)	—	—	1 patient (mild)	2 patients (mild)	Side Effects Not Treated

ncrease in hostility minimized
h Vistaril and chlordiazepoxide



Cooperativeness not a significant problem



nAlcoholism...

Vistaril®

HYDROXYZINE PAMOATE)

BRIEF SUMMARY

Contraindications: Hypersensitivity to hydroxyzine. The parenteral solution, for intramuscular or intravenous use, *must not* be injected subcutaneously or intra-arterially.

Hydroxyzine, when administered to the pregnant mouse, rat, and rabbit induced fetal abnormalities in the rat at doses substantially above the human therapeutic range. Clinical data in human beings are inadequate. Until adequate data are available to establish safety in early pregnancy, hydroxyzine is contraindicated during this period.

Prccautions: Hydroxyzine may potentiate the action of central nervous system depressants such as narcotics and barbiturates. In conjunctive use, dosage for these drugs should be decreased, as much as 50%. Because drowsiness may occur, patients should be cautioned against driving a car or operating dangerous machinery. The usual precautions for intramuscular injection should be followed; soft-tissue reactions have rarely been reported when proper technique has been used. Hydroxyzine parenteral solution for intramuscular use should be injected well within the body of a relatively large muscle. In adults, the preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus), or the mid-lateral thigh. In children, preferably the mid-lateral muscle of the thigh. In infants and small children the upper outer quadrant of the gluteal region should only be used when necessary, as in burn patients, in order to minimize the possibility of damage to the sciatic nerve. The deltoid area should be used only if well developed, such as in certain adults and older children, and only with caution to avoid radial nerve injury. Injections should not be made in the lower and middle thirds of the upper arm. Aspiration should be done to help avoid intravascular injection. On reported intravenous injection a few instances of digital gangrene have occurred distal to the injection site, considered to be due to inadvertent intra-arterial injection or possibly periarterial extravasation. Therefore, particular caution (aspiration and site injection) should be observed to insure injection only into intact veins; avoid either intra-arterial injection or extravasation. Intravenous administration should be accomplished slowly, no faster than 25 mg. per minute, and not to exceed 100 mg. in any single dose. In order to avoid possible adverse effects it is recommended that hydroxyzine parenteral solution be diluted to at least 50 cc. with sterile normal saline and administered over a period of four minutes or more, preferably into the tubing of a running intravenous infusion.

Adverse Reactions: Drowsiness may occur; if so, it is usually transitory and may disappear in a few days of continued therapy or upon dosage reduction. Dryness of the mouth may occur with higher doses. Involuntary motor activity, including rare instances of tremor and convulsions, has been reported, usually with higher than recommended dosage.

When this product is given intravenously undiluted, minimal amounts of intravascular hemolysis occur at the site of injection. Giving the maximum recommended intravenous dose (100 mg.) to adults results in immediate transient hemolysis with the liberation of a total of 2-3 grams of hemoglobin, which, in some individuals, can cause small amounts of hemoglobinuria. This compares with the normal red cell destruction from which approximately 8 Gm. of hemoglobin are liberated every 24 hours. If the hydroxyzine is diluted with 50 cc. of normal saline and given during a period of four minutes or more, this phenomenon does not occur.

Supply: Vistaril (hydroxyzine pamoate) Capsules: Equivalent to 25 mg., 50 mg., 100 mg. hydroxyzine HCl. Vistaril (hydroxyzine pamoate) Oral Suspension: Equivalent to 25 mg. hydroxyzine HCl per 5 cc. teaspoonful. Vistaril (hydroxyzine HCl) Parenteral Solution: 25 mg./cc.—10 cc. vial and 50 mg./cc.—2 cc. and 10 cc. vial; Isoject,® 25 and 50 mg. per cc., 1 cc. per unit.

More detailed professional information available on request.

Reference: 1. Knott, D.H. and Beard, J.D.: GP 36:118, September, 1967.

Pfizer LABORATORIES DIVISION
New York, N.Y. 10017

Night Leg Cramps . . . Unwelcome Bedfellow

In Diabetes[1], Arthritis[2], and Peripheral Vascular Disorders[2]



now . . . specific therapy for night leg cramps

Walker

QUINAMM™

Consistently effective, QUINAMM provided complete relief in 94% of 200 patients studied, many of whom were severe cases refractory to other medication.[3] Your prescription for one tablet at bedtime often controls painful night cramps with the initial dose . . . helps restore restful sleep.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

Prescribing Information: Composition: Each white, beveled, compressed tablet contoins: Quinine Sulfate 260 mg. ond Aminophylline 195 mg. **Contraindication:** QUINAMM is controindicoted in pregnoncy because of its quinine content. **Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such os tinnitus, dizziness, and gostrointestinal disturbance. Discontinue use if ringing in the eors, deafness, skin rash, or visual disturbonces accur. **Dosage:** One tablet upon retiring. Where necessary, dosoge may be increased to one toblet following the evening meol ond one tablet upan retiring. **Supplied:** Battles of 100 ond 500 toblets. **References:** 1. Shumon, C.: Am. J. Med. Sci., 225:54, 1953. 2. Perchuk, E., et ol.: Angiology, 12:102, 1961. 3. Rowls, W., et ol.: Med. Times, 87:818, 1959. 6/67 Q-706A


or your protection . . .
njections in this office are given with TUBEX*, using
a new, sterile disposable unit with a new, supersharp,
stainless steel, siliconized sterile needle
. . . designed for one use only.
CTO–DEC., 1966
TUBEX® Closed Injection System, Wyeth
PRINTED IN U S A —CODE 7409
Your name
on the dotted line
can mean so much
to your patients
And to you . . . . . .

. . . . . The TUBEX® Closed-Injection System means

Efficiency and convenience

TUBEX injectables are ready for immediate use. No measuring of doses; no filling of syringes. Saves professional time. Easy to store in the office, easy to carry on house calls.

Precision and protection from cross contamination

TUBEX injectables are premeasured, accurately and clearly identified as to name, dose, control number and expiration date (if any). Used once, then discarded, TUBEX prefilled sterile cartridge-needle units cannot cause cross contamination.

Coverage of virtually all injection needs

The wide range of drugs available in TUBEX sterile cartridge-needle units can meet over 70% of common private practice injectable needs. For drugs not yet in TUBEX form, empty sterile cartridge-needle units can usually be employed—and retain most advantages of the system.

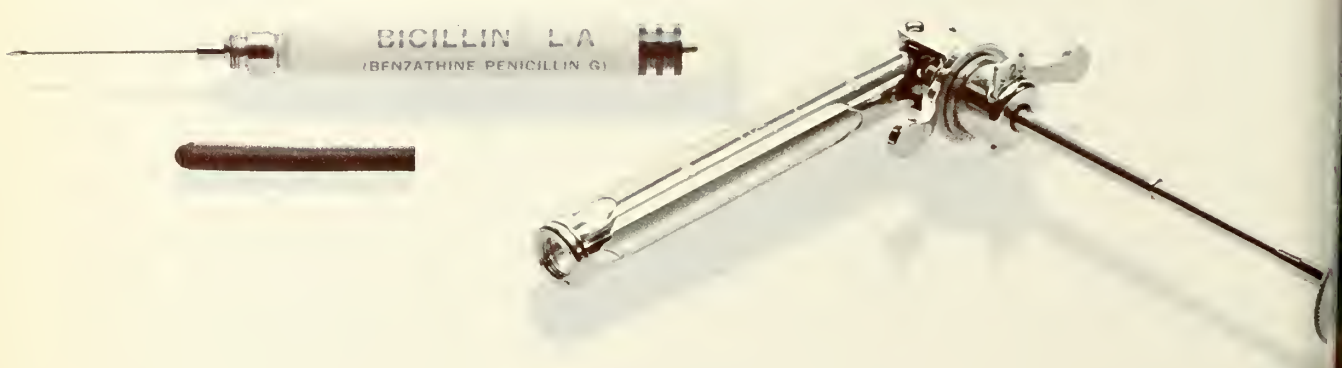
TUBEX® Closed Injection System

Wyeth® SERVICE TO MEDICINE

If you are already using TUBEX in your office and don't have a waiting-room placard, Wyeth will be happy to send you one. A postcard will do.

Wyeth Laboratories
Professional Service
Box 8299
Philadelphia, Pa. 19101

UD UNIT-DOSE





Eli Lilly and Company
Indianapolis, Indiana 46206

If hypothyroidism leaves your patient feeling like this...

consider

LETTER®

(SODIUM LEVOTHYROXINE, ARMOUR) TABLETS

Synthetic Thyroid Replacement Therapy



Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects**: Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage**: Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available**: Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

ARMOUR PHARMACEUTICAL COMPANY • CHICAGO, ILLINOIS



"Man's best friend" in wintertime diarrheas

In winter "flu" and viral gastroenteritis, Donnagel (4 oz. size!) can bring aid and comfort to sufferers from both diarrhea and its discomforts because it contains kaolin and pectin plus belladonna alkaloids (as in Donnatal®). Donnagel treats the whole diarrhea problem. Available on your prescription or recommendation. A. H. Robins Company, Richmond, Va. 23220

A·H·ROBINS

CLEAR THE TRACT! ROBITUSSIN®



THERE'S A FORMULATION FOR EVERY COUGHING NEED

All the Robitussins contain glyceryl guaiacolate, the outstanding expectorant agent that greatly increases the output of lower respiratory tract fluid. Increased RTF volume exerts a demulcent effect on the tracheo-bronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise.

For coughs of colds and "flu"
ROBITUSSIN®
Each 5 cc. contains:
Glyceryl guaiacolate . . . . 100 mg.
Alcohol, 3.5%

For unproductive allergic coughs
ROBITUSSIN® A-C
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Pheniramine maleate . . . . . 7.5 mg.
Codeine phosphate . . . . . 10.0 mg.
(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hour cough control
ROBITUSSIN®-DM
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Dextromethorphan hydrobromide . 15.0 mg.
Alcohol, 1.4%

New! Clears sinuses and nasal stuffiness as it relieves cough
ROBITUSSIN®-PE
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Phenylephrine hydrochloride . . . 10.0 mg.
Alcohol, 1.4%

	ROBITUSSIN	ROBITUSSIN A-C	ROBITUSSIN-DM	ROBITUSSIN-PE
EXPECTORANT	●	●	●	●
DEMULCENT	●	●	●	●
COUGH SUPPRESSANT		●	●	
ANTIHISTAMINE		●		
LONG-ACTING (6-8 HOURS)			●	
NASAL, SINUS DECONGESTANT				●

TO BY VICTOR HANO

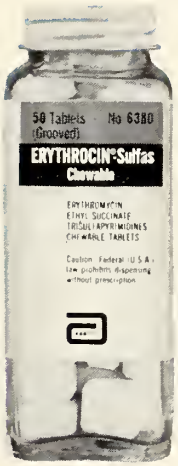
A. H. Robins Company, Richmond, Va. 23220

A·H·ROBINS



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New–Two Pediatric Forms of Erythromycin and Triple Sulfas





ERYTHROCIN-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials[1,2], this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated[1,2]—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

A clinical cure rate of 97.7%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

ABBOTT

Brief Summary on next page

ERYTHROCIN®-SULFAS
Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steriods, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

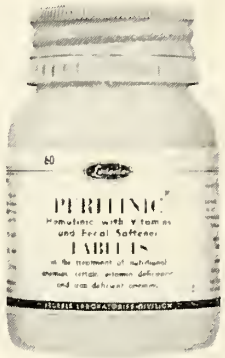
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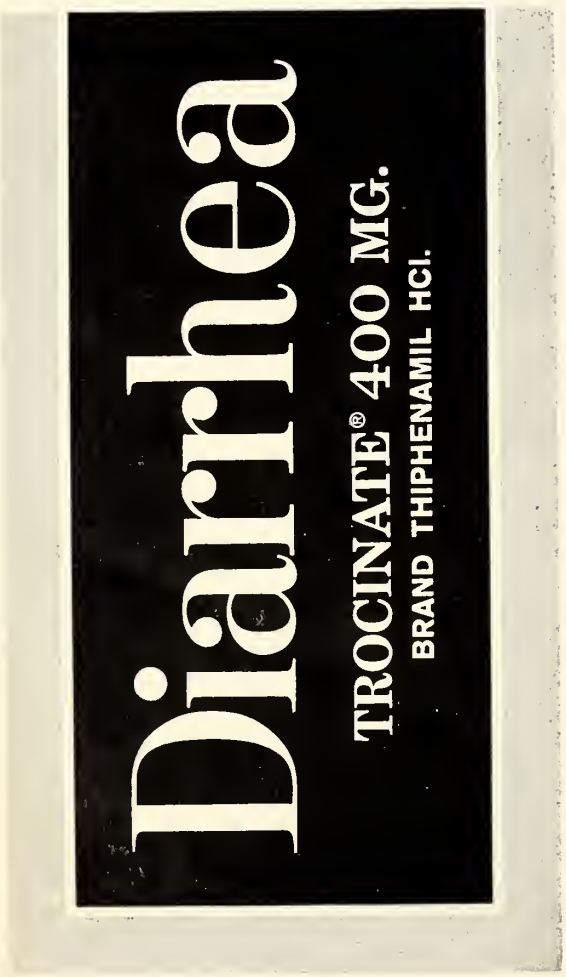
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References

1 Combes, F. C. and Canizares, O.: *New York State J. Med* 52 706-708 (Mar. 15) 1952.
2 Xander, G. W.: *Western Med* 1:14 (Sept.) 1960.
3 Baker, A. G.: *Penna. Med. J* 63:697-698 (May) 1960.
4 Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R.: *Northwest Med.* 75.1249-1252 (Nov.) 1955.

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(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (Initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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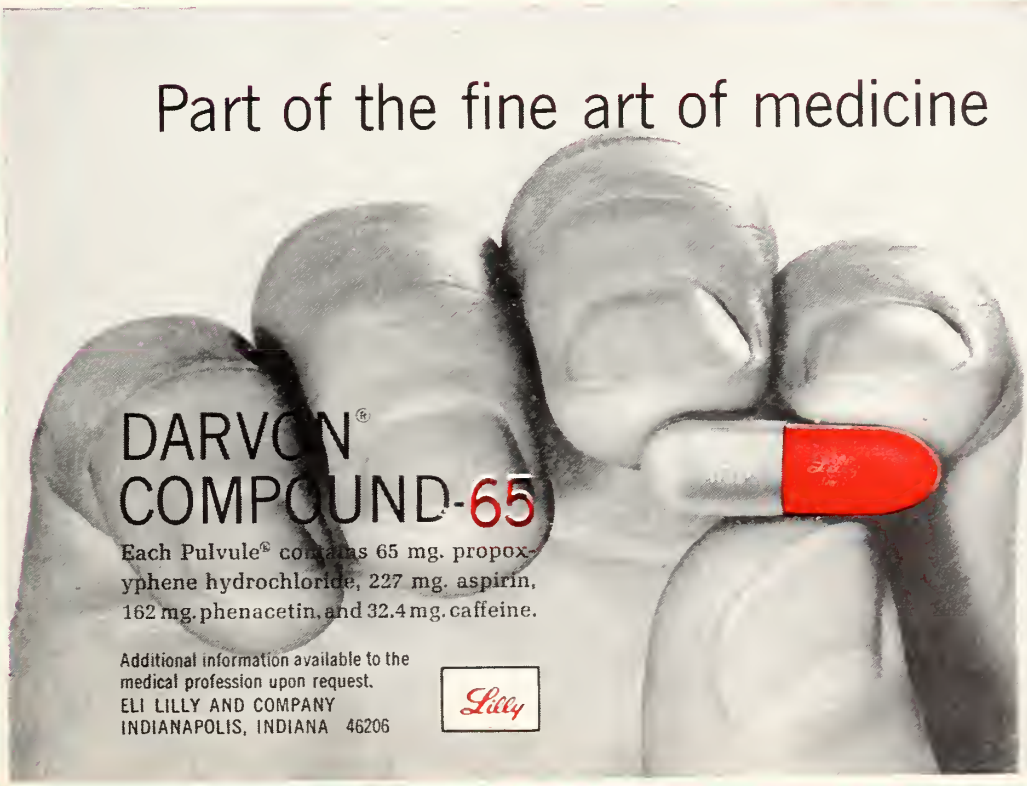
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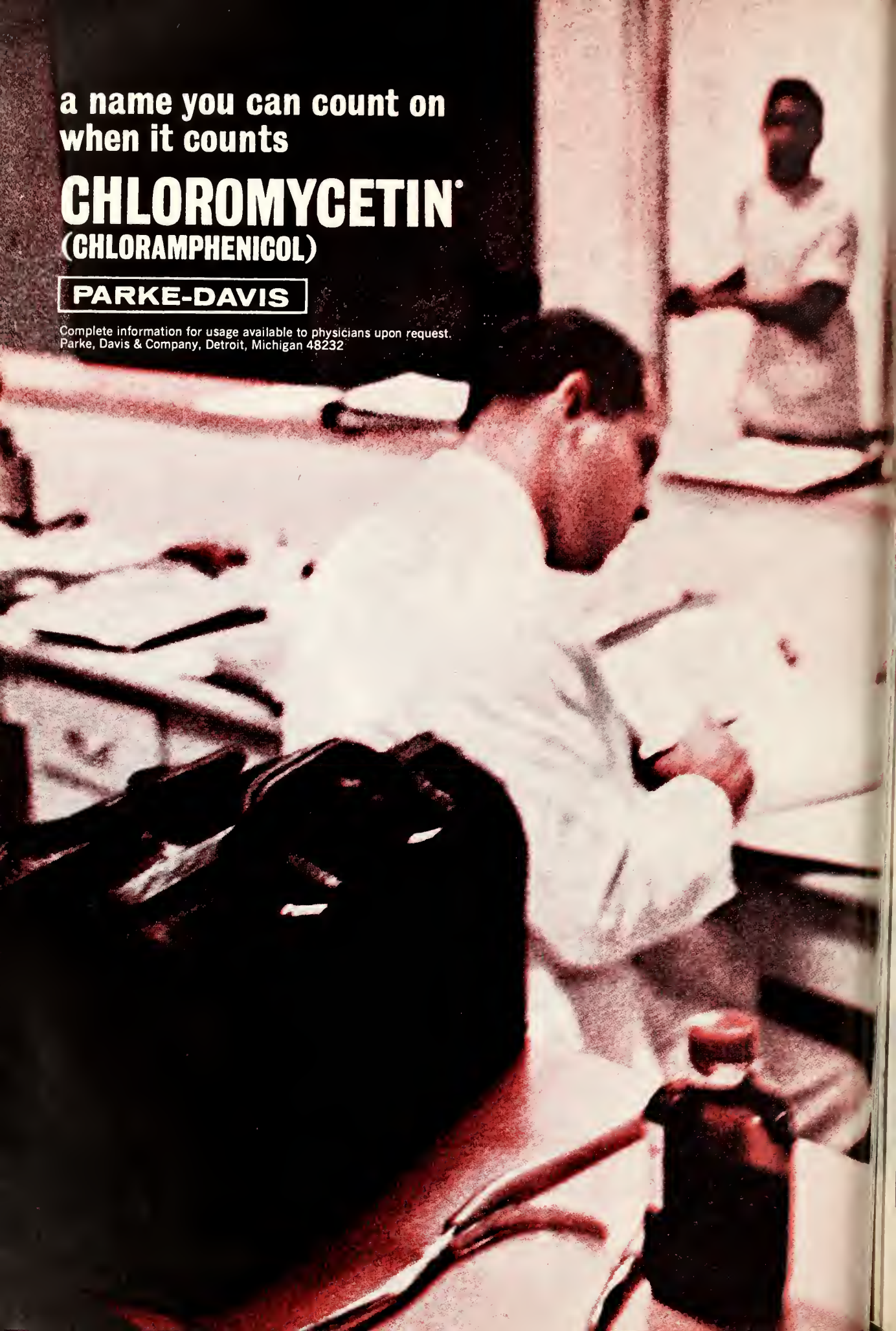
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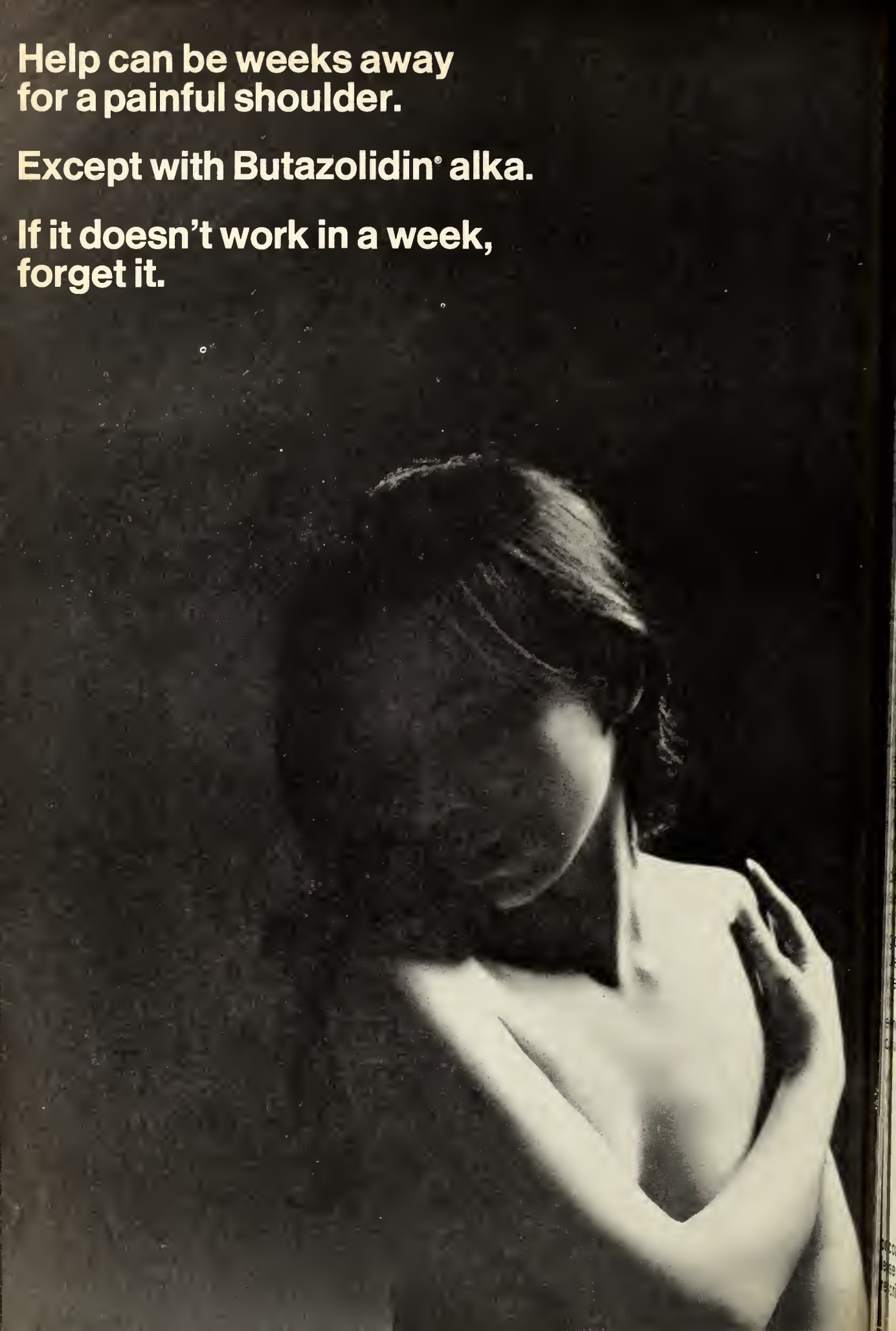
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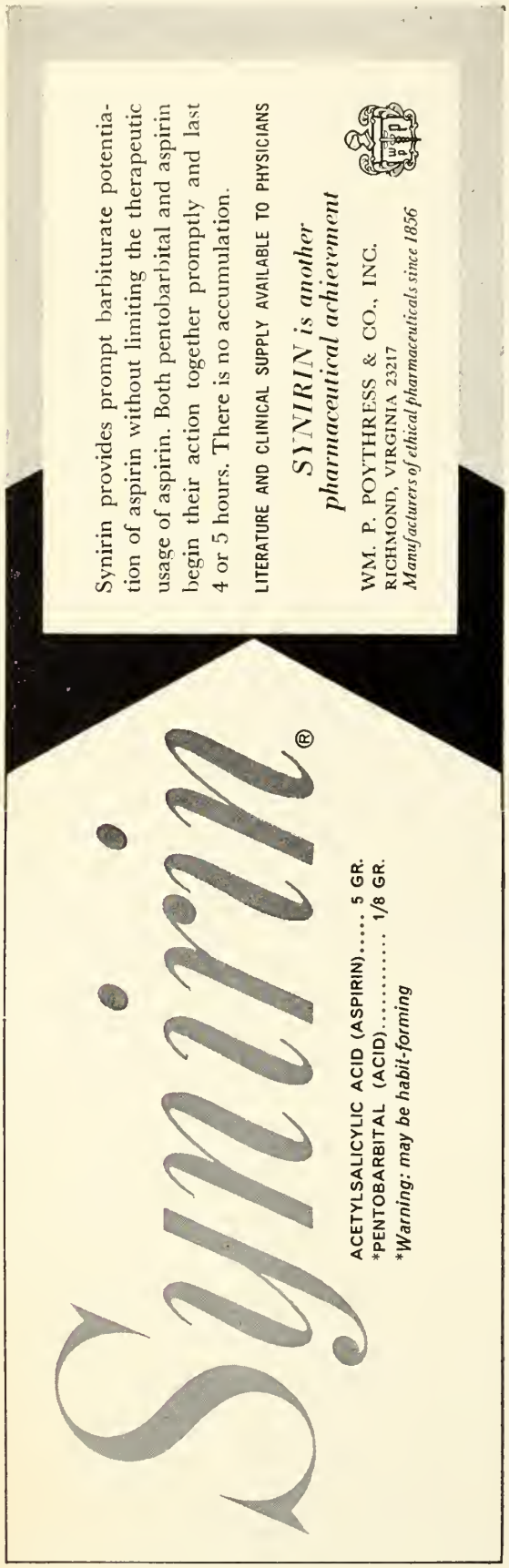
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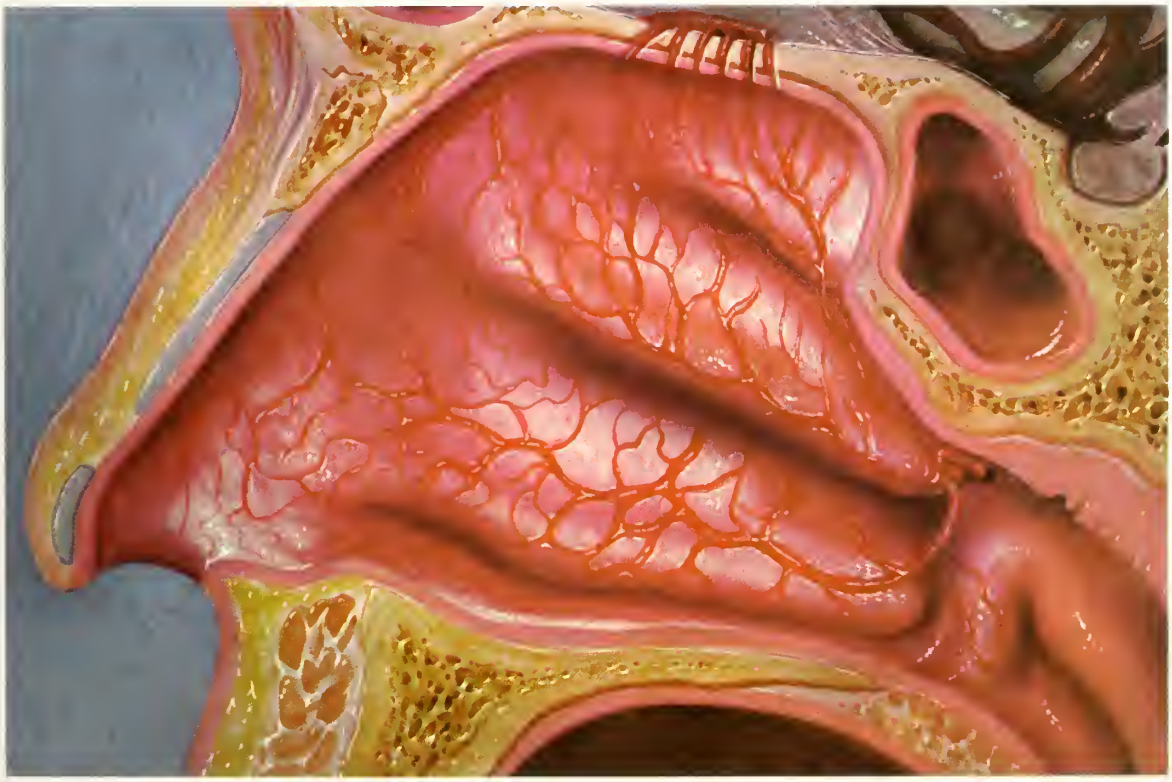
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this issue: the cold in pregnancy...

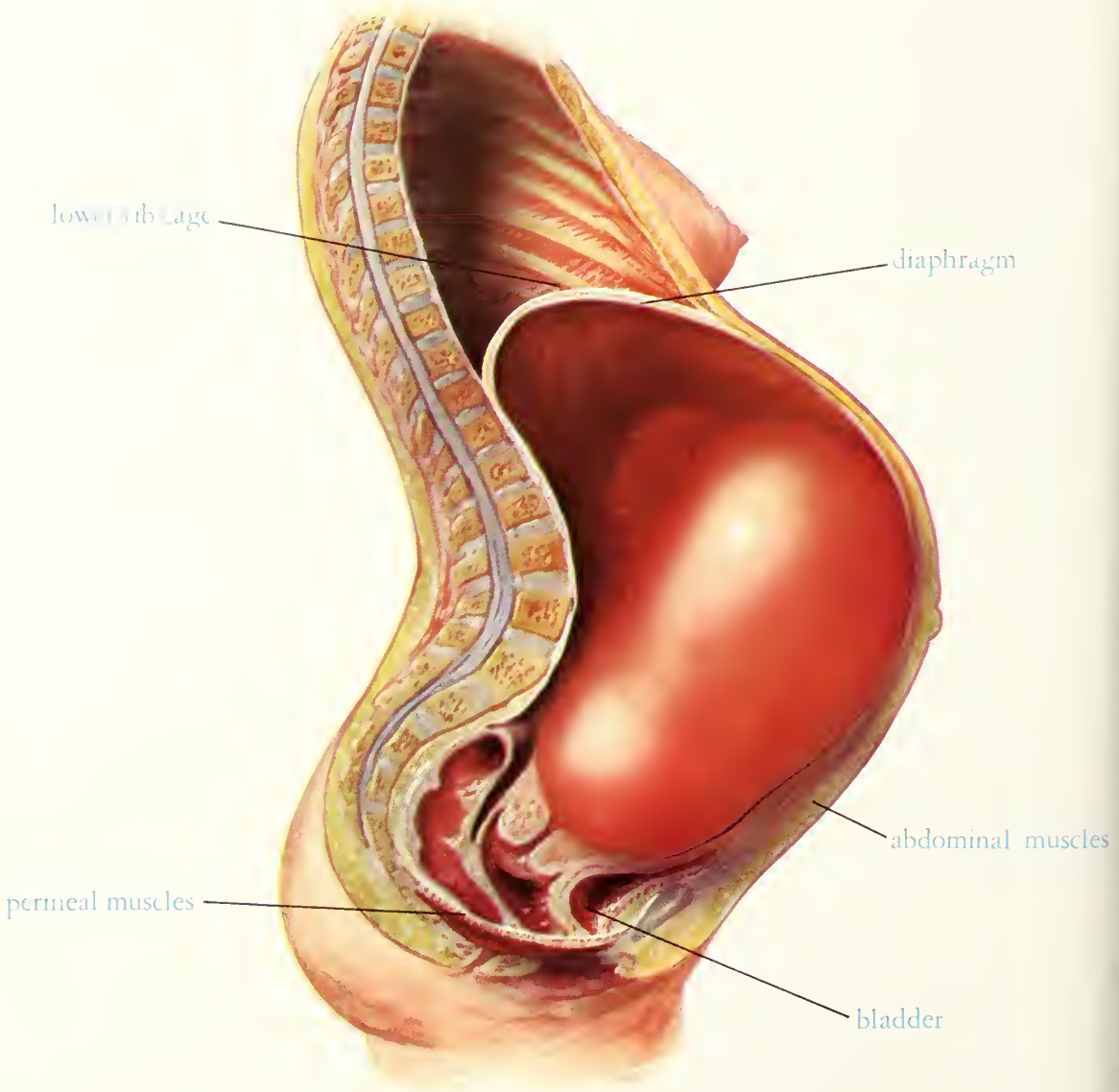
the cold in pregnancy

Frederick W. Goodrich, Jr., M.D.
Senior Obstetrician and Gynecologist, Lawrence and Memorial Hospital, New London, Connecticut

Since pregnancy and the common cold are both ubiquitous, it is not surprising that they often occur at the same time in the same patient. Incidence figures are hard to come by, but the chances are very good that any given pregnant woman will have a cold at some time during the nine months of her gestation. When she does, she will tell you that it is the worst cold she ever had. It seems to last longer and the symptoms are more distressing than they are in the non-pregnant.

For purposes of this discussion, the common cold is considered to be the well-known symptom complex which includes sore throat, stuffy nose, and a cough. Febrile states or extension of the disease process into the lower respiratory tree are not part of the common cold and will not be included in this discussion.

The clinical picture of a cold in pregnancy can be confused by a long-known physiological phenome



on. Kiesselbach's area in the nose (on the anterior art of the nasal septum above the intermaxillary one) becomes engorged, apparently due to hyperemia induced by the increased estrogen level which accompanies pregnancy. The amount of congestion can vary in degree from woman to woman. Some have very little congestion, others will have occasional nosebleeds from this area, still others will have symptomatic congestion to the degree that they will complain of having a "chronic" or constant cold.

Less well recognized is the occurrence of this type of hyperemia in any part of the nasopharyngeal mucosa, again in varying degree. Such swelling often produces a postnasal drip which, the patient will state, is present only when she is pregnant. Patients who do not have symptomatic congestion ordinarily, will find that when they do get a cold, the symptoms last much longer than those of a cold usually do. Occasionally, this hyperemia is responsible for closure of the medial end of the Eustachian tube; such patients will complain of "plugging" of the ears. Inspection of the ear drum will show a depression which confirms the presence of Eustachian closure rather than wax in the canal which is the patient's diagnosis. Symptoms related to this physiological congestion are more apt to occur in heavier smokers or those who have a history of allergic rhinitis, just as are the symptoms of the common cold. And when the cold does occur in pregnancy, the symptoms are worse because of the underlying congestion.

The pregnant woman with a cold is miserable for three reasons, dependent somewhat on her parity and the length of her gestation. As parity increases, so does the relaxation of the abdominal and perineal musculature. The uterus, lying against a lax abdominal wall, and bearing down on relaxed perineal muscles, acts like a piston when the patient coughs, sneezes, or even blows her nose, pushing down on the bladder. Stress incontinence during a cold is almost the rule.

As the length of gestation increases, so does the size of the uterus. As it grows, it pushes the abdominal contents above it and elevates the diaphragm. This results eventually in a lateral displacement of the lower rib cage, often to a point at which the patient will complain of soreness in this area. If such a

(Concluded on following page)

From a continuing study on nasal congestion...



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patient has a cold, the coughing and sneezing will exaggerate this soreness. The diaphragmatic restriction caused by the enlarging uterus also makes breathing more difficult, particularly when the patient lies down. A cold compounds this difficulty.

Treating a cold in pregnancy requires two additional considerations. The patient should be told that the symptoms may last longer lest she become discouraged, and she should be reassured that the treatment will not damage the fetus. Although there are still some women who seem blissfully ignorant regarding matters of health (and these need to be cautioned not to take medication recommended by friends), most of our maternity patients are aware of the thalidomide tragedy. These women need constant reassurance that the symptoms of a cold can be treated, and that the medication is safe. Fortunately, many of the drugs which are of benefit have been in use long enough and widely enough so that such a statement can be offered. Occasionally one encounters a patient who is so anxious to avoid medication that she is extremely reluctant to take anything at all. Since cold is self-limited, it seems reasonable enough to give such a patient the choice and not to force drugs on her if she is obviously afraid of taking them.

The most distressing symptom of the common cold is the nasal congestion. This can be mitigated by the use of a decongestant which will help reduce the postnasal drip and the coughing caused by it. The kind of a cough which is described as a "tickling" in the throat and which is apt to occur when the patient goes to bed is usually due to nasopharyngeal congestion rather than inflammation in the lower respiratory tract.

There are many cough mixtures available. Most contain an antihistamine, a decongestant, and a cough "suppressant." Should cough suppression be desirable, it is important to remember not to use both a decongestant tablet and such a cough mixture as the patient would be getting a double dose of the decongestant. With some patients, the placebo effect of a cough syrup may be important and a liquid preparation might be substituted for an oral tablet.

For a sore throat, candy drops or lozenges at frequent intervals are soothing. It is not only unnecessary but unwise to use antibiotic lozenges or drops. The use of antibiotics in an uncomplicated cold is contraindicated and should be scrupulously avoided.

In summary, a cold in pregnancy is more severe and longer lasting. The treatment of the symptoms with local and systemic decongestants will make the patient more comfortable.

Apparently the cold is so common in pregnancy that it has received very little attention in the literature. References are almost non-existent and the few which are available add little to the common knowledge, are out-dated, or are not helpful. Thus the usual bibliography is not appended.



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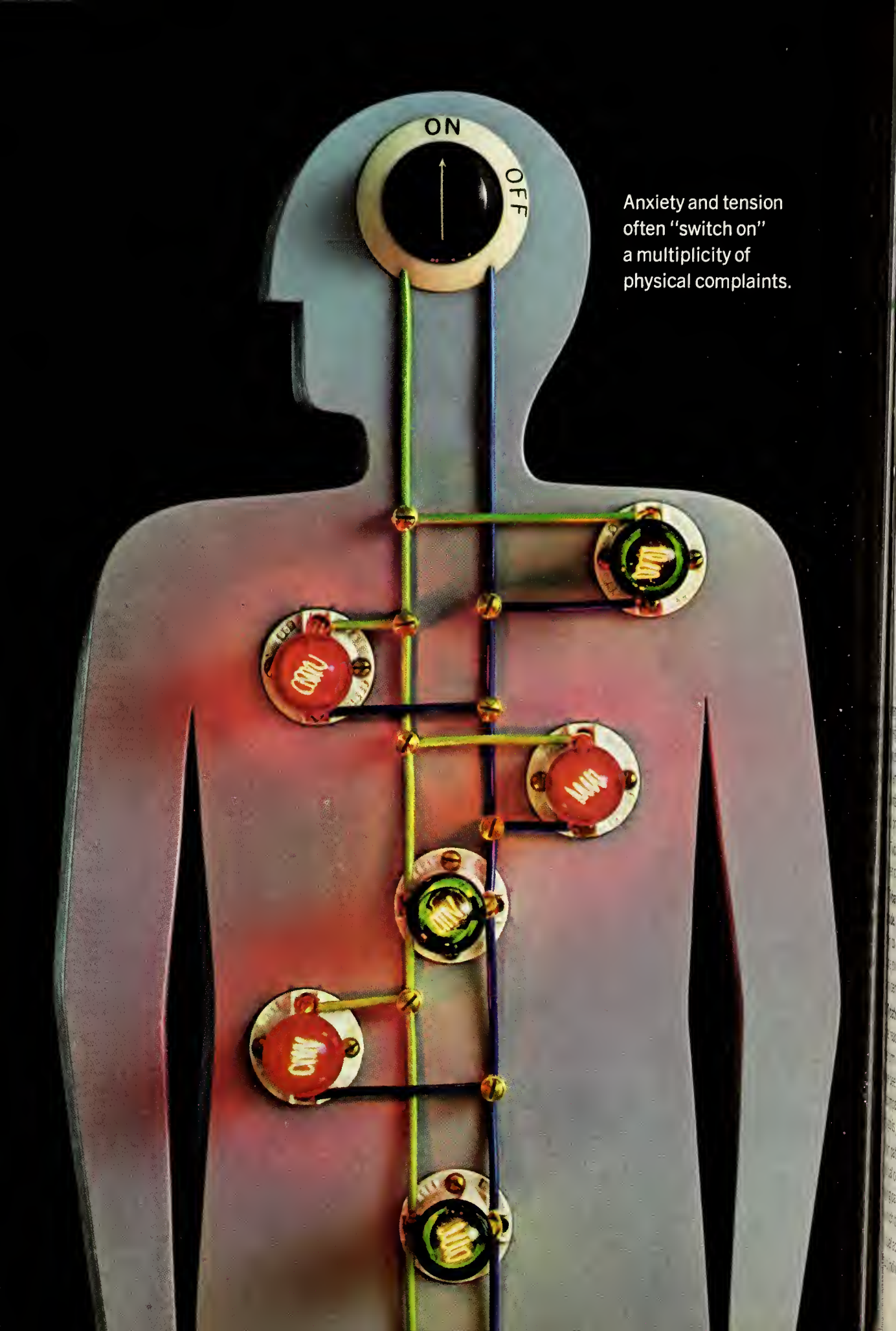
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Dosage and administration. The suggested adult dose of Tybatran (tybamate) is one or two 250 mg. capsules three or four times daily. Dosage should be adjusted to suit individual requirements. While clinical experience with Tybatran (tybamate) in children has been very limited to date, the recommended daily dosage for children 6 to 12 years old is 20 to 35 mg./kg. body weight, in three or four equally divided doses. Dosage should be adjusted to suit individual requirements. Until further clinical experience is obtained, administration of Tybatran (tybamate) to children under 6 years of age is not recommended. Daily doses larger than 3000 mg. are not recommended, although in a few instances doses in excess of this figure have been administered. Tybatran (tybamate) is also available in 350 mg. capsules, for convenience in dosage adjustment, e.g., one capsule three times daily and two at bedtime.

Contraindications. Tybatran (tybamate) should not be administered to patients known to be hypersensitive to the drug. Since no studies have been done with this drug in human pregnancy, it should not be used in pregnancy unless the potential benefit outweighs the risk.

Warnings. Simultaneous administration to psychotic patients of tybamate with phenothiazines and other central nervous system depressants has in a few instances been associated with the occurrence of grand mal or petit mal seizures. Seizures have been reported with administration of phenothiazines alone, but not with administration of tybamate alone; nevertheless, tybamate should be used cautiously in individuals who are receiving other central nervous system depressants or have a history of convulsive seizures. Also it should be borne in mind that simultaneous administration of tybamate with alcohol or with other psychotropic agents, particularly phenothiazines or monoamine oxidase inhibitors, which are known to potentiate the action of other drugs, may result in additive actions.

Precautions. There has been no evidence to date of the development of habituation or addiction. Investigators have not observed excessive self-medication or any withdrawal symptoms with use of Tybatran (tybamate), but the latter should be kept in mind with cessation of the drug after prolonged use. Because of the occurrence of

Prescribing information continued on next page.

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Prescribing information continued from preceding page.

withdrawal symptoms or exacerbation of presenting symptoms upon rapid withdrawal of other agents of this type, abrupt withdrawal of Tybatran (tybamate) should be avoided. Tybamate, like other psychotherapeutic agents, should be used with caution in addiction-prone individuals. Should symptoms of hypersensitivity occur, administration should be discontinued at once and appropriate symptomatic treatment initiated. Operation of motor vehicles or machinery or other activities requiring optimal mental alertness should be avoided if drowsiness or vertigo is present. As with any new drug, Tybatran (tybamate), should be used with caution in patients with a history of drug allergies, blood dyscrasias, and hepatic or renal disease; and prolonged and/or high doses of tybamate should be accompanied by periodic measurements of hepatic, hematopoietic, and renal function.

Adverse reactions. While these have only rarely required discontinuation of the drug, the most frequently encountered reactions have included drowsiness, dizziness, nausea, insomnia, euphoria. The drug was discontinued in one child because of a possible drug-induced urticaria, and skin rash and pruritus have been encountered in a few other patients. In a few patients, effects suggesting excessive stimulation such as hyperactivity, fidgetiness, flushing, and tachycardia have been encountered. Other reported side effects recorded only a few times to date have included ataxia, unsteadiness, confusion, feeling of unreality, "panic reaction," fatigue, headache, paresthesias, vertigo, gastrointestinal disturbances, glossitis and dry mouth. Grand mal or petit mal seizures have been reported in a few hospitalized psychotic patients to whom tybamate (up to 6000 mg. daily), phenothiazines, and other psychotropic agents were administered simultaneously. Convulsive seizures have not been reported with the use of tybamate alone.

Until clinical experience has accumulated with this drug, inasmuch as tybamate is related to meprobamate, the physician should be cautious about the possibility of rare, serious adverse reactions such as may be encountered with the latter drug. Should excessive doses of tybamate be ingested, it is recommended that any drug remaining in the stomach be removed and symptomatic therapy, including central stimulants, be used as necessary.

Supply. Tybatran (tybamate) is available in green, sealed capsules of three strengths: 350 mg., 250 mg., and 125 mg. Each strength is supplied in bottles of 100 and 500.

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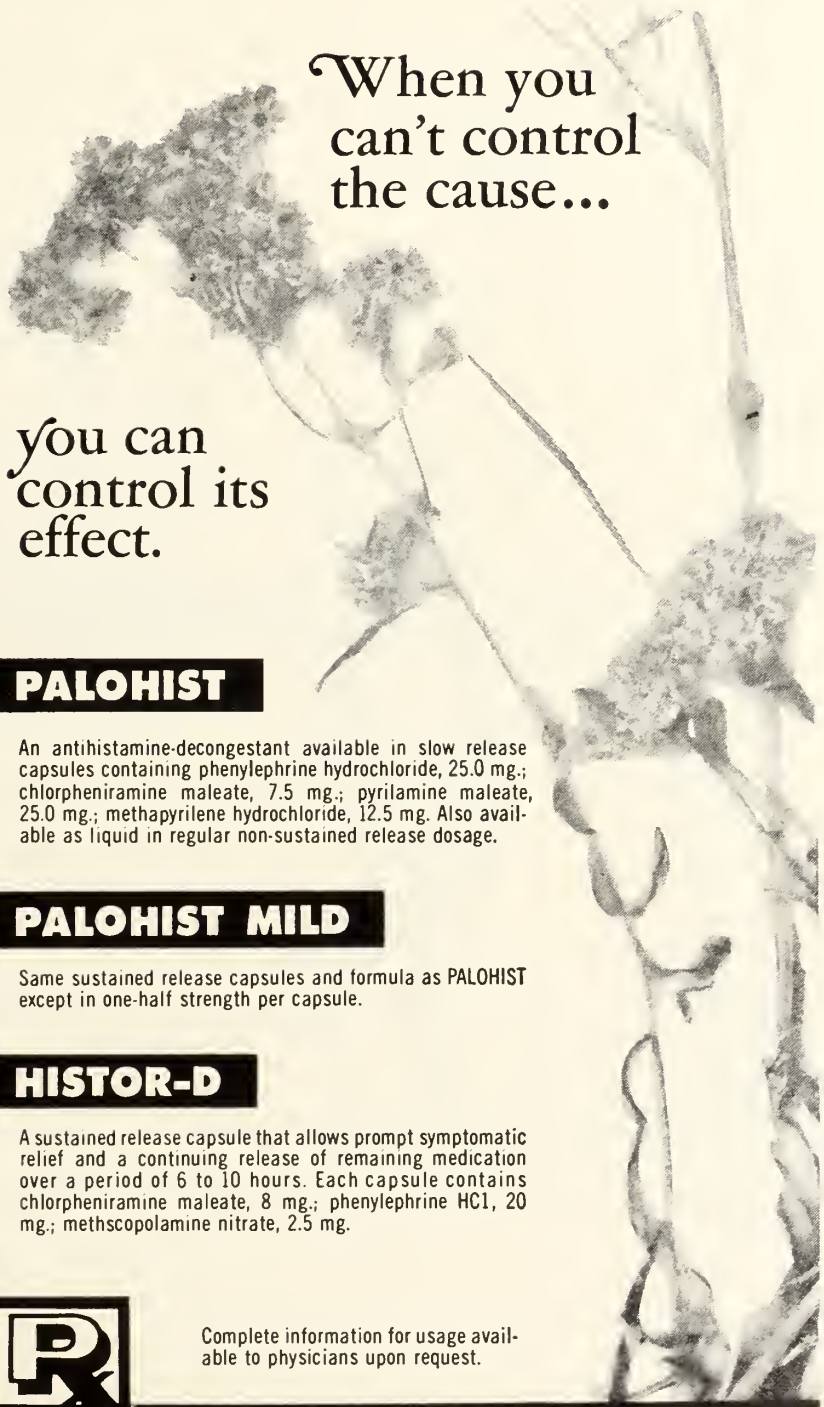
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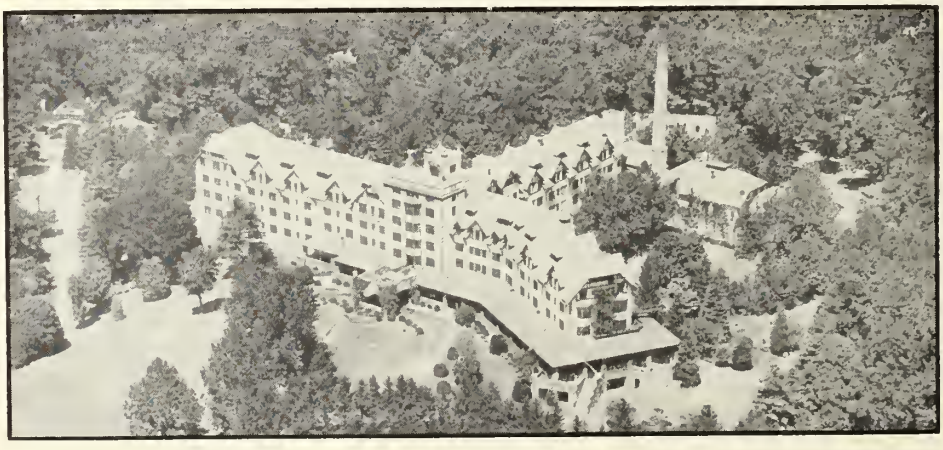
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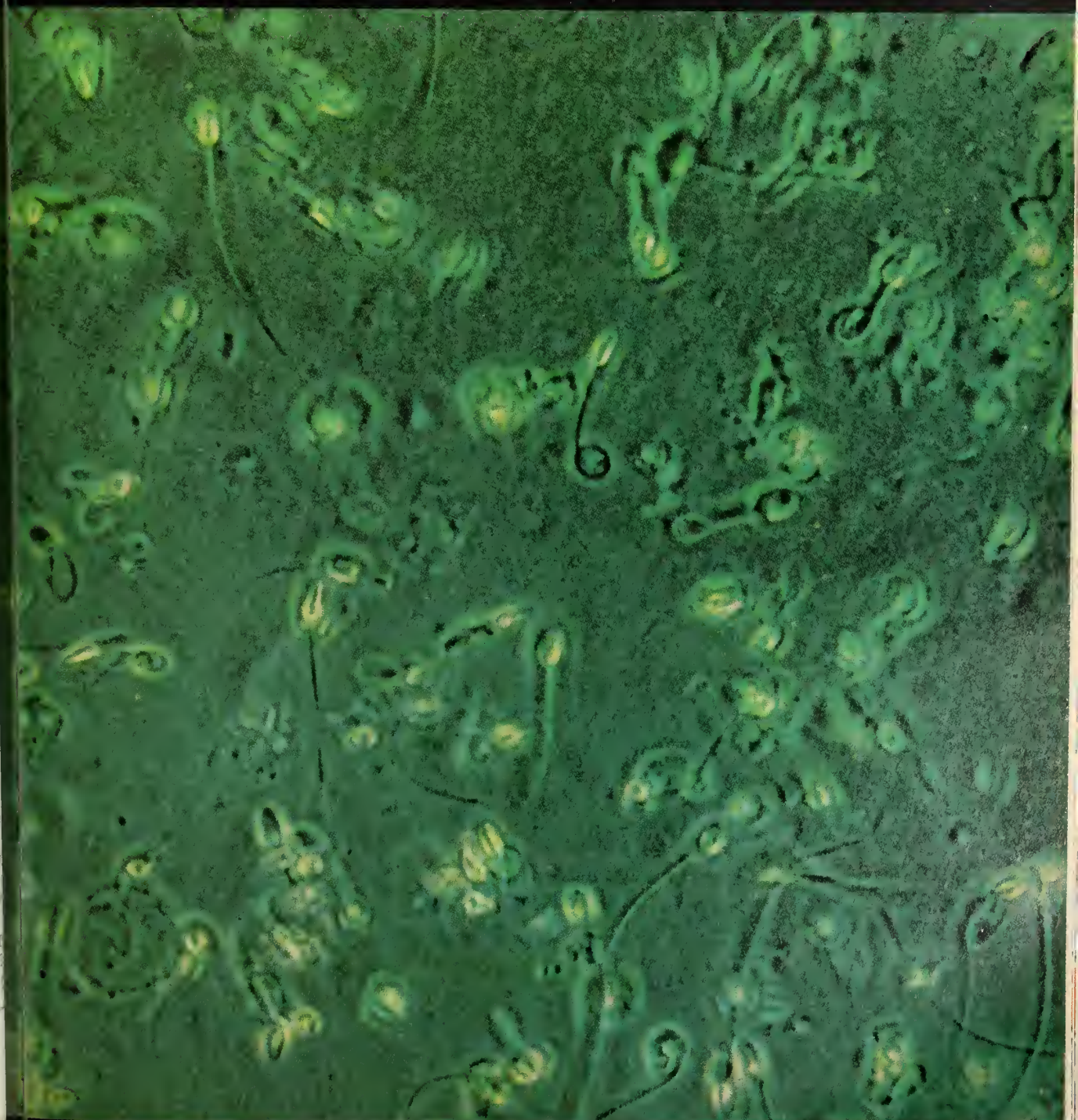
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In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretion, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, change in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, itching.

The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has been neither established nor disproved): thrombophlebitis, pulmonary embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine, decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from
SYNTEX
LABORATORIES INC. PALO ALTO, CAL.

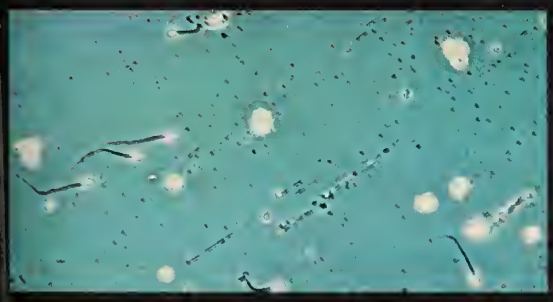
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

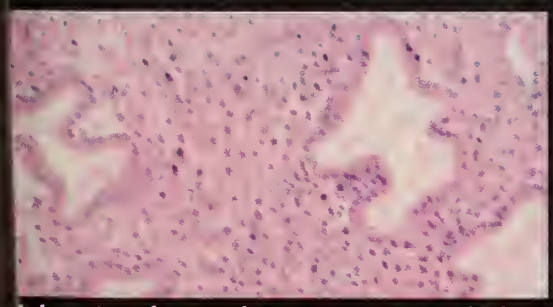
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

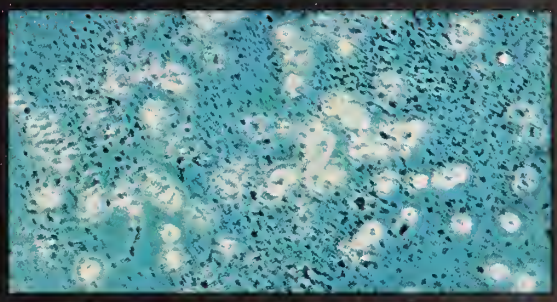


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

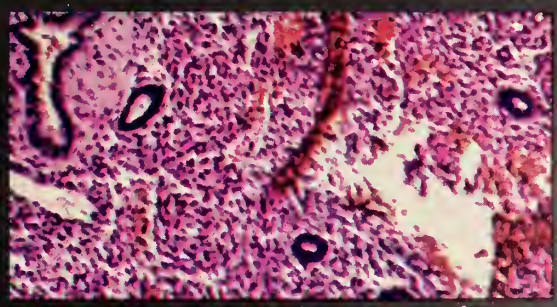
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets

(norethindrone 1mg. & mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar
fluocinolone acetonide





Turn page for contraindications, precautions and side effects.

For everyday topical steroid therapy

Synalar® 0.01%

fluocinolone acetonide provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

fluocinolone acetonide — an original steroid from

SYNTEX LABORATORIES INC., PALO ALTO, CALIF.





"Yes, Doctor, the pain is gone."

EMPIRIN'® COMPOUND with CODEINE PHOSPHATE gr. 1/2 No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning – May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.


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Keflin®
Sodium
Cephalothin
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Eli Lilly and Company
Indianapolis, Indiana 46206
800486



who goes for checkups?

A vital question. For if early diagnosis and treatment can cure cancer, obviously regular health checkups are essential.
In a survey conducted for the Society, we discovered that only 26% of those questioned had such regular checkups.
But 90% said, *if their physicians told them to do so,* they would have annual checkups. This confirmed what we have long known—your key role, doctor, in *activating* your patients in good health practices.
We alert the public with facts about cancer.
You follow through by urging regular checkups.
A life-saving combination.

AMERICAN CANCER SOCIETY

"American Cancer Society, South Carolina Division, Inc."



in moderate hypertension and
poorly controlled mild hypertension
(when diuretics or sedatives are inadequate, for example)

When your patients expect a lot...

like relief from hypertensive symptoms
(headache, fatigue, nervousness, palpitation or insomnia, for example)

like an up-to-date, once-a-day dosage schedule
(a schedule not unlike timed-release medication, for example)

like a daily dose of medication for peanuts
(at 10¢ a tablet, for example)

like generally well-tolerated therapy
(as described in the package insert, for example)

...give them a little
(one tablet daily)

Regroton®

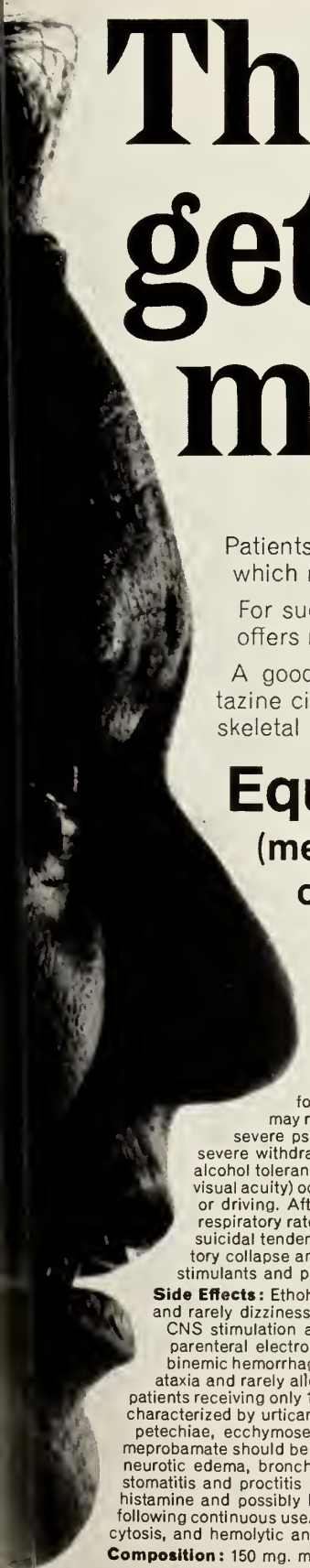
chlorthalidone 50 mg., reserpine 0.25 mg.

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes. thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-B
For details, see complete Prescribing Information.

Geigy Pharmaceuticals, Division of
Geigy Chemical Corporation, Ardsley, N.Y.

Geigy





This pain is getting on my nerves.

Patients in pain often experience concomitant anxiety and tension, which may add to the burden of pain.

For such patients, you may want to prescribe a preparation that offers more than simple analgesia.

A good choice is often EQUAGESIC® (meprobamate and ethoheptazine citrate with aspirin). It helps relieve pain. And anxiety. And skeletal muscle spasm as related to pain or anxiety and tension.

Equagesic® TABLETS

(meprobamate and ethoheptazine citrate with aspirin)

Wyeth®

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with immediate gastric lavage and appropriate supportive therapy (CNS stimulants and pressor amines as indicated).

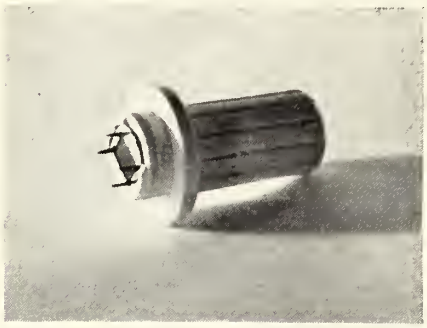
Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



TUBERCULIN, TINE TEST
(Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

Lederle

330—8/6135

exercise & ARLIDIN® (NYLIDRIN HCl)



Easy on the Budget... Easy on the Mother

Tablets & Elixir For Iron Deficiency Anemia

FAMOUS Fergon®
brand of FERROUS GLUCONATE

BREON LABORATORIES INC.
Subsidiary of Sterling Drug Inc.
90 Park Avenue, New York, N.Y. 10016

b.i.d.

The sensible schedule that covers the patient day and night

If your objective in the use of a broad-spectrum antibiotic is prolonged action, with high blood levels, then you know why b.i.d. DECLOMYCIN is considered to be a sensible dosage schedule.

The maintenance dosage of DECLOMYCIN can be kept at this convenient schedule because of its unusually high effective blood and tissue levels.

The b.i.d. dosage of DECLOMYCIN gives you the comfortable assurance that the patient is well-covered, *day and night.*

In clinical practice, blood levels produced by a therapeutic dose of DECLOMYCIN are high, prolonged, and effective; because of high serum binding and slow renal clearance. And if there's a broader susceptibility pattern of organisms, we've yet to see it.

There is no need to give higher daily dosage than 300 mg b.i.d., except in venereal diseases and Eaton Agent pneumonia.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle

Prescribing information on next page.

b.i.d. The sensible schedule that covers the patient day and night

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity: onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth— dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm. given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg. of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg. every 6 hours for a minimum of 4 doses or 300 mg. every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg. every 6 hours or 300 mg. every 12 hours until a cure is effected.

Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg. in 3 divided doses for six days.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, N.Y.

Lederle

491-7—6046

If hypothyroidism leaves your patient feeling like this...

consider

LETTER®

(SODIUM LEVOTHYROXINE, ARMOUR) TABLETS

Synthetic Thyroid Replacement Therapy



Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

ARMOUR PHARMACEUTICAL COMPANY • CHICAGO, ILLINOIS



Phenaphen® with Codeine

the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.) ..... 16.2 mg.
(Warning: may be habit forming)
Aspirin (2½ gr.) .....162.0 mg.
Phenacetin (3 gr.) .....194.0 mg.
Hyoscyamine sulfate.....0.031 mg.
Codeine phosphate.....¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A-H-ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

For your impatient cold patients

Two sprays from NTZ Nasal Spray—and nasal congestion, rhinorrhea, sneezing are reduced for *immediate* comfort for patients with colds.

NTZ is more than a simple vasoconstrictor. It contains:

Neo-Synephrine® **(brand of phenylephrine) HCl 0.5 per cent,** the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction on contact.

Thenfadil® **(brand of thenyldiamine) HCl 0.1 per cent,** topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® **(brand of benzalkonium, as chloride, refined) 1:5000,** antiseptic preservative and wetting agent to promote penetration and spread of the formula.

NTZ is well tolerated. Used in a cold it may help prevent sinusitis by opening sinus ostia and permitting drainage. It may also be used in sinusitis to help establish drainage.

The spray is best used twice, the second a few minutes after the first, repeated every three or four hours as needed. NTZ is for temporary relief of nasal symptoms, and overdosage should be avoided.

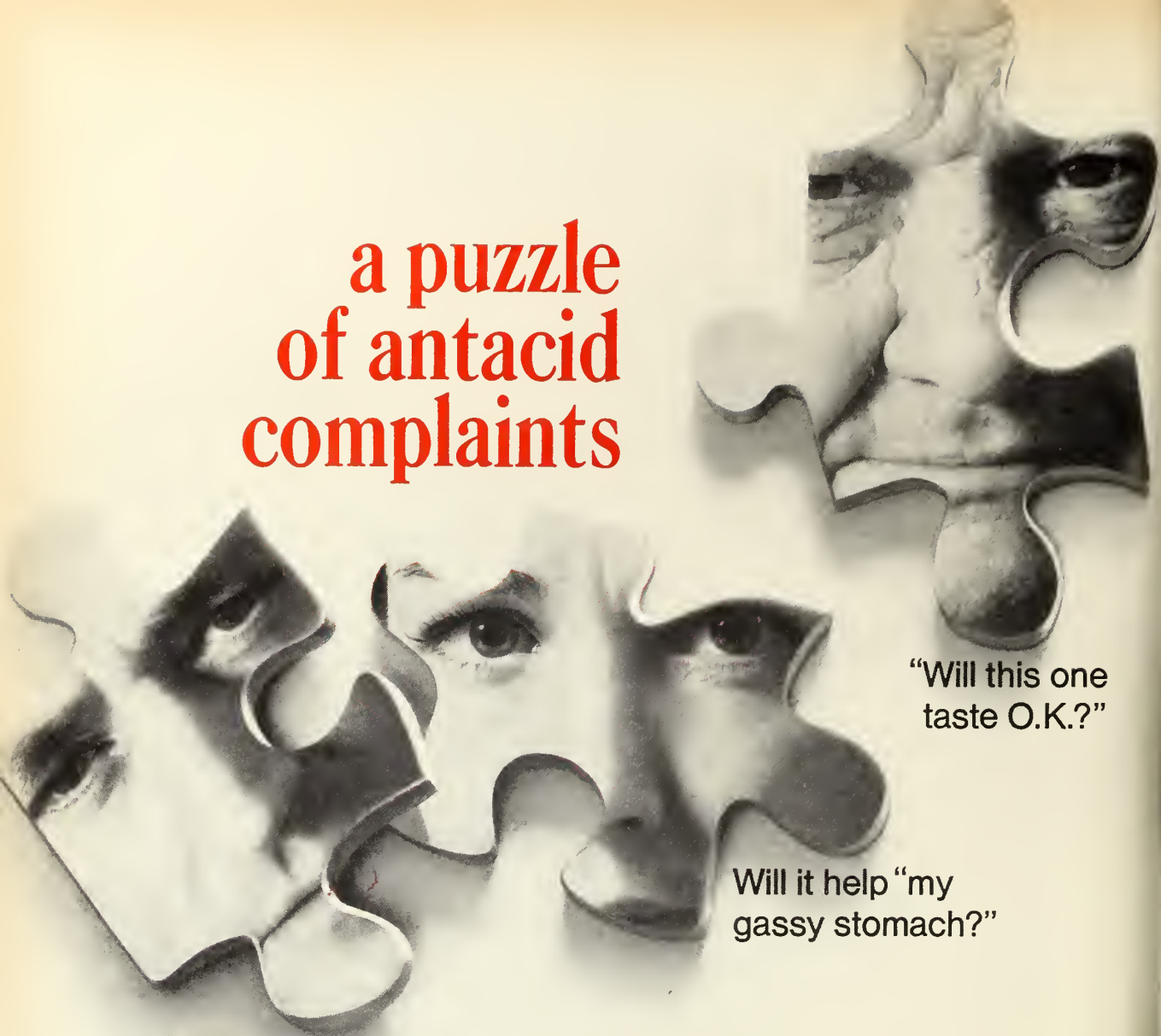
Supplied: NTZ Nasal Spray, plastic squeeze bottles of 20 ml.; NTZ Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

Winthrop

Winthrop Laboratories
New York, N.Y. 10016



a puzzle of antacid complaints



Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

a solution to peptic ulcer distress

Effective neutralization—
with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

Concomitant relief of G.I. gas distress—
with the proven[1] defoaming action of simethicone.

Prolonged acceptance confirmed—
in 87.5% of 104 patients after a total of 20,459 documented days of therapy.[2]

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg.
Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Relerences: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.



bronchodilation in asthma...without "jitters"

Most anti-asthmatic products contain ephedrine-like drugs. ELIXOPHYLLIN® never did. So, ELIXOPHYLLIN will not cause nervousness, palpitations, insomnia, or other undesirable side effects of ephedrine-like products.

Other advantages of ELIXOPHYLLIN: rapid and sustained bronchodilation • convenient, adjustable dosage • hypoallergenic • adrenergic abuse eliminated.

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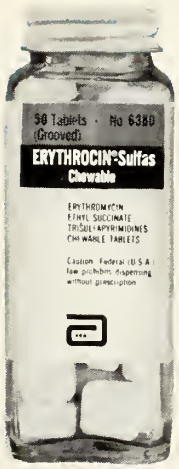
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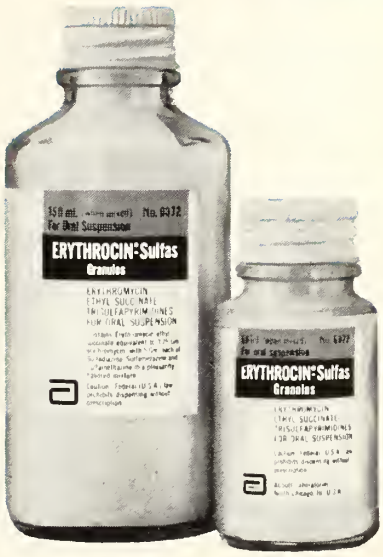
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53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

A clinical cure rate of 97.7%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

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Brief Summary on next page

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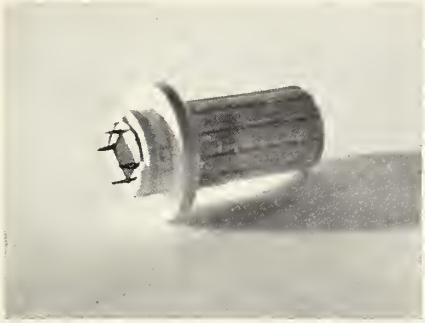
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The Journal
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VOLUME 64 FEBRUARY, 1968 NUMBER 2

EROSIVE ADENOMATOSIS OF THE NIPPLE

H. RAWLING PRATT-THOMAS, M.D.
Charleston, S. C.

Erosive lesions of the nipple are most likely to evoke suspicion of Paget's carcinoma, as this is the most common serious cause of a crusting and eczematoid nipple, with or without occasional bleeding.

There is a benign neoplastic lesion of the nipple which clinically mimics Paget's carcinoma and requires biopsy for differentiation. Although this lesion is clinically and grossly identical with Paget's carcinoma its microscopic appearance is very different and quite characteristic.

An example of this lesion was submitted to this department in July, 1966. I had not seen the lesion previously and review of the papillary and adenomatous lesions of the breast for five random years did not reveal any similar lesions.

A description of this case and a review of the historical evolution of this lesion is the basis for the present report.

Case Report

A 36 year old white woman complained of a swollen, red, crusting and scaling right nipple of 3 months duration. There was no discharge and no masses within the breast. The attending physician's clinical impression was Paget's disease.

The surgical specimen consisted of a 4.5 cm x 2.5 cm ellipse of skin with a centrally located 1.5 cm nipple which was firm, slightly roughened and mottled whitish-tan. A segment of breast tissue was attached. On sectioning there was a 0.5 cm firm, dull grayish-white area within the substance of the nipple which did not extend into the underlying breast and was situated in direct approximation to the skin.

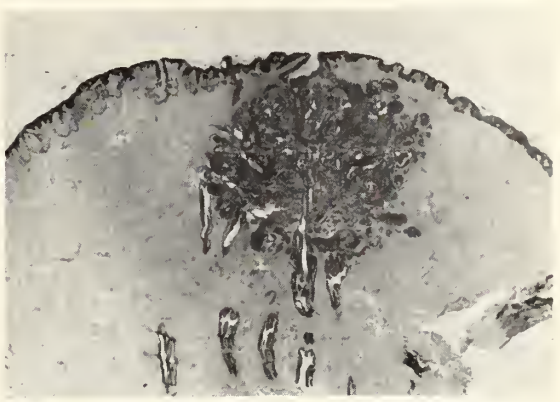


Fig. 1. Adenomatous and papillary nodule within the nipple, closely situated to the skin surface. Hematoxylin and eosin, X8.

Microscopic examination revealed that the duct system within the nipple was filled with a nodular, adenomatous and papillary proliferative epithelial process (Fig. 1) which was creeping along the ducts toward the surface of the nipple, and actually reaching the surface in places (Fig. 2). Tubular and ductal spaces contained some solid compact collections of cells, but most frequently the spaces showed a cribriform arrangement or exhibited papillary folding and invaginations of the lining cells (Fig. 3). The cells were cuboidal and columnar, frequently having a clear secretory type cytoplasm situated in the luminal portion of the cell. The cell clusters were surrounded by a clearly defined mantle of myoepithelial cells (Fig. 4). In some of the best formed ductal structures, a double layer of cells was clearly discernible, but in some of the more hyperplastic and disorganized areas this arrangement was lost. Mitoses, while not numerous could be found without difficulty. There was no microscopic resemblance to Paget's carcinoma (Fig. 5.) The diagnostic interpretation was that

From the Department of Pathology of the Medical College of South Carolina, 80 Barre Street, Charleston, S. C.

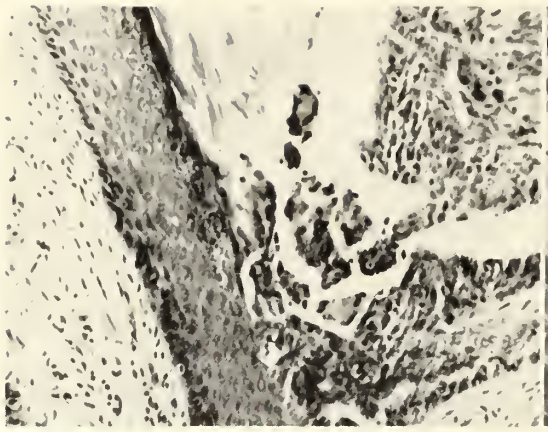


Fig. 2. Papillary clusters of epithelial cells extending along the stratified squamous epithelial lining of the duct orifice. Hematoxylin and eosin, X250.



Fig. 3. Papillary adenomatous pattern in erosive adenomatosis with extension into the orifice of a duct. Hematoxylin and eosin, X40.

of low-grade papillary intraductal carcinoma, probably non-invasive.

A simple mastectomy was performed. The changes of mild benign mastoplasia were present in the residual breast tissue, but nothing else.

Historical and Pathological Evolution

It is probable that Geschickter[1] in 1945 referred to this lesion when he mentioned papillomata occurring in the ampulla of the nipple which produced ulceration and required biopsy for differentiation from Paget's carcinoma. Haagensen, Stout and Phillips[2] in their paper on duct papilloma

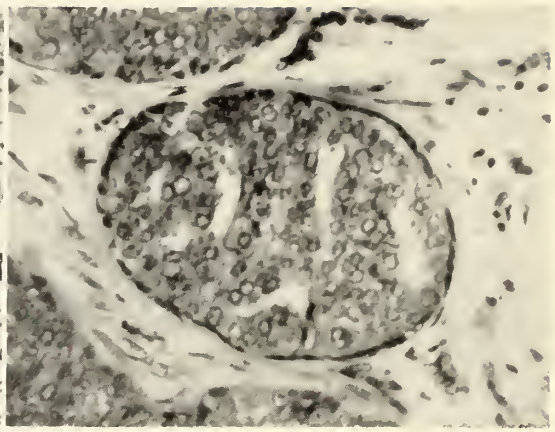


Fig. 4. Adenomatous nodule surrounded by a mantle of clearly defined myoepithelial cells. Hematoxylin and eosin, X-350.

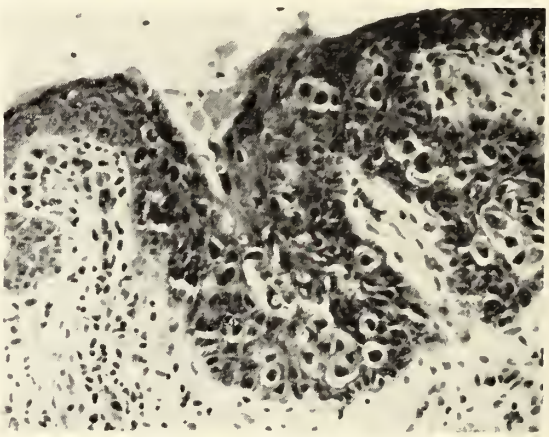


Fig. 5. Large, clear, hyperchromatic malignant neoplastic cells of Paget's carcinoma invading skin of nipple. There is no resemblance to erosive adenomatosis. Hematoxylin and eosin, X-320.

in 1951 illustrated an adenoma of the nipple which is identical with many of those since reported. It is described as "a benign papilloma growing in a duct within the nipple and presenting as a granulating lesion from its orifice on the nipple surface".

Haagensen[3] in Fig. 176 of his book illustrates a typical erosive adenoma growing within the nipple but captions it as an intraductal papilloma. Although he quotes Jones' description of "florid papillomatosis", Haagensen considers the lesion as a diffuse papilloma modified by scarring. I do not believe this to be tenable.

It remained for Jones[4] to make the first formal presentation of this entity, which

he termed florid papillomatosis of the nipple. He presented five cases. Two of these at the time of operation had been designated as malignant, two benign, and one indeterminate. The frozen section report on one of those termed benign described it as a "sweat gland adenoma-like lesion", a very prespicacious diagnosis, as will be discussed later.

Frank W. Foote of Memorial Hospital saw three of Jones' most exuberant cases in consultation and stated that these lesions had been designated in that laboratory as terminal duct papillomatosis for many years.

Nichols, Dockerty and Judd[5] collected 16 cases from the files of Mayo Clinic and mentioned two other cases which they had seen.

Handley and Thackray[6] described nine cases, one bilateral, in 1962. Their article is accompanied by abundant illustrative material which clearly portrays the gross and microscopic features of this condition.

The latest series of cases was presented by Miller and Bernier.[7] These authors collected ten cases, including an example in a nine-year-old girl and the first case to be reported in a male patient.

Discussion

The importance of this lesion emanates from its clinical and pathological aspects. The first because the lesion is indistinguishable from Paget's carcinoma, and the second from the difficulty in histologically distinguishing this tumor from a low-grade non-invasive intraductal papillary carcinoma.

These facts are well illustrated in the series of 16 cases reported by Nichols, et al.[5] The preoperative diagnosis was Paget's disease in 12 cases and should have been so diagnosed in another instance as the changes were characteristic. In the same series 13 of the cases were diagnosed as papillary or adenocarcinoma. Seven of the patients had simple mastectomy and four had radical procedures.

The occasional presence of a gross nodular lesion within the nipple in erosive adenomatosis differs from Paget's carcinoma in that the duct carcinoma which is the basic lesion of Paget's disease is either not visible grossly or is situated deeper within the duct system. The nodular lesions of erosive adenomatosis are not usually detectable until the nipple area has been sectioned, but may occasionally be palpable. In many instances there is no obvious tumor either upon sectioning or palpation.

The presence of sharply defined myoepithelial cell mantles about the cell clusters and the manner in which the epithelial cells grow along the ducts and finally present on the skin surface via the duct orifices are the most helpful histologic features in establishing benignancy. The erosion of the nipple is not in the manner of true ulceration, but is identical with the erosions of the cervix in which endocervical epithelium replaces exposed portions originally covered by stratified squamous epithelium.

Of course, knowledge of the existence of this lesion and its structural composition is the sine qua non of accurate interpretation. Once this lesion has been seen it is not apt to be mistaken.

Considerable confusion in terminology exists, but erosive adenomatosis seems most fitting to histologic appearance and behavior. It also avoids confusion with the intraductal papilloma from which this lesion is distinctly different. Some disagreement occurs in the writings concerning whether the lesion is papillomatous or adenomatous. As a matter of fact it is both. It is probably best described as an adenomatous lesion in which a variable degree of papillary infolding occurs, a papillary adenoma.

The resemblance of this lesion to certain apocrine gland tumors has been noted by several authors, including the pathologist previously mentioned, who recognized the similarity on frozen section. This

should come as no surprise as phylogenetically the breast is an apocrine gland. Both the gross and microscopic appearance of this lesion is comparable to syringocystadenoma papilliferum. Perhaps erosive adenomatosis arises from pluripotential cells of the peripheral mammary duct system and is indeed closely allied to syringocystadenoma, which is believed by some authorities to be a hamartoma.

No recurrence or metasasis of erosive adenomatosis has ever been recorded. Many patients have been observed for long periods of time, the surest way of assessing the histologic potential of such a lesion. The evidence and consensus is that erosive adenomatosis is benign.

Conclusions

Erosive adenomatosis is a benign lesion of the nipple clinically indistinguishable from Paget's carcinoma.

It resembles tumors of apocrine gland origin, and its more exuberant forms may be mistaken for intraductal papillary adenocarcinoma.

My many thanks are hereby expressed to Dr. David L. Maguire, Jr. for permission to report this case and to Mr. Robert A. Brown, Director of Medical Illustrations who prepared the photomicrographs.

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Present Status of the Treatment of Burns—Curtis P. Artz, and Dabney R. Yarbrough, III Bull N Y Acad Med 43(8):627-635, 1967.

Burns today continue to constitute a major health hazard. A disproportionately high death rate from burn injuries is noted in the Southeastern United States. The incidence, significance and causes of burns are reviewed. The various methods of assessing the depth and extent of burns is discussed and the clinical characteristics of partial and full-thickness burns are outlined.

Major advances have been made recently in the management of burn wound infection due to the use of Sulfamylon and 0.5 per cent silver nitrate solution. Deaths from pulmonary complications are being seen with greater frequency as deaths from burn wound sepsis decline. The major complications in burns are reviewed briefly.

C. P. A.

Outbreak of Infectious Syphilis in S. C.—R. M. Ball JAMA 193:13 (July) 1965.

In a textile manufacturing city with a population of 10,435 and with 11 private physicians, the importance of cooperation between private medicine and public health was effectively demonstrated in the control of an epidemic of 45 cases of early syphilis. The chain of infection involved 365 white persons in five counties and eight states. Of the total cases, 26 were reported by 15 different physicians in the town and environs. All physicians reporting requested patient interview and epidemiologic follow-up. A team of workers dispatched to the area instituted all techniques of rapid epidemiology, finding cases in the early infectious stages. Coincidentally an intensive educational program was launched in the city and vicinity. In five months the epidemic was brought under control, and in the ensuing seven months only four new cases developed in the area.

SOUTH CAROLINA MATERNAL MORTALITY

Report for 1965

WILLIAM W. KELLETT, III, M.D.
E. J. DENNIS, III, M.D.
Charleston, S. C.

The definition of maternal death utilized in this report by the Committee on Maternal and Child Care of the Council on Medical Service of the American Medical Association; that is, "the death of any woman dying of any cause whatsoever while pregnant or within ninety days of the termination of pregnancy, irrespective of the duration of pregnancy at the time of the termination or the method by which it was terminated." Maternal mortality has proved to be the most significant indicator of the adequacy of maternity care. Statistical analyses of maternal mortality indicate the most frequent factors involved and point to the areas of maternity care that warrant special attention.

This analysis was undertaken through the South Carolina Medical Association's Maternal Health Committee whose purpose is to evaluate each maternal death as it occurs. Data contained in this report were obtained through the Committee's standard form for routine maternal deaths, maternal death certificates, and infant birth certificates. Unfortunately, in 1965, almost half of the standard forms submitted were incomplete. It is not the intent of the Maternal Health Committee to judge or castigate those reporting maternal deaths. The purpose is to discover what, if any, preventable factors are involved in maternal deaths in South Carolina.

During the year 1965 there were 52,449 live births in South Carolina and 41 maternal deaths reported. By comparison in 1964, there were 56,874 live births and 36 maternal deaths and in 1963, 58,304 live births and 42 maternal deaths. Of the total births in 1965, 30,258 were white and 22,191 non-white. The maternal deaths are listed in Table I according to race and legitamacy.

Table I

Race	No.	Legit.	Illegit.	Unknown
Non-White	30	18	10	2
White	11	8	2	1

The overall rate or incidence of maternal death per 10,000 live births was 7.8 in 1965 as compared to 6.4 in 1964, and 7.2 in 1963. This is an incidence of one maternal death in every 1,279 live births.

Table II shows the age and parity distribution:

Table II

	Non-White	White
Age	17-45	19-41
Average Age	29.3	29.8
Primipara	5	0
Gravida	2 or more	
Secundipara	2	3
Multipara	13	4
Unknown	10	4

Table III lists the primary causes of death. When several factors were said to have contributed to a maternal death, the primary cause of death is listed according to which of these, in our opinion, was the most significant. It is well recognized that occasional errors in assignment may have been made because of the problems inherent in such a retrospective review.

Table III

Primary Causes of Maternal Death

	Non-White	White
Hemorrhage	8	1
Toxemia	4	3
Pulmonary Embolus	7	1
Sepsis	4	2
Acute Pulmonary Edema	1	2
Cerebral Vascular	1	1
Cardiac	2	1
Renal Failure	2	0
Amniotic Fluid Embolus	1	0

Toxemia was recorded as the primary cause of death in seven cases. By comparison toxemia was known to be present in 16 of the patients as seen in Table IV.

Table IV

	Non-White	White
Eclampsia	2	2
Pre-Eclampsia	4	4
HCVD	2	0
Unknown	15	5
No toxemia	7	0

The nine deaths attributed to hemorrhage deserve further analysis. A breakdown of the causes of the hemorrhage is shown in Table V.

Table V

Causes of Deaths by Hemorrhage

Abruptio Placentae	2
Retained Placenta	1
Ruptured Uterus	1
Ruptured Ectopic	1
Unknown	4

One of the cases of abruptio placentae occurred in a gravida 10 who was admitted in shock and had an emergency cesarean section, hysterectomy, and hypogastric artery ligation. The other was a patient with no prenatal care, severe hypertensive cardiovascular disease, and hypofibrinogenemia. The death due to retained placenta was in a patient who delivered at home unassisted and arrived at the hospital DOA. The case of ruptured uterus was attended by a midwife, admitted in shock, had an emergency hysterectomy but died eight hours postpartum. One patient died in the emergency room, and an autopsy revealed a ruptured ectopic pregnancy. In four cases the cause of hemorrhage was unknown; one was thought to be due to afibrinogenemia.

Of the eight deaths attributed to pulmonary embolism, only two were confirmed by autopsy. One 41 year old patient had a myocardial infarction during the first trimeser, a tubal ligaion 36 hours postpartum, and subsequent pulmonary embolism. The other autopsied patient arrived dead at the emergency room after suspected cervical instrumentation. Of the six remaining deaths attributed to pulmonary embolus, four occurred at home.

There were six deaths due to sepsis and one of these was the culmination of a septic abortion in a 28 year old colored female. Another was in a 23 year old patient who had amnionitis, a repeat cesarean section and postoperative endometritis and peritonitis. She expired 15 days postparum. A 39 year old patient with rheumati cheart disease died seven days postpartum due to staphylococcic septicemia.

Acute pulmonary edema was listed as the primary cause of death in three cases. One of these was in a 16 year old primigravida with pre-eclampsia and no prenatal care. She had a cesarean section for cephalopelvic disproportion and survived cardiac arrest on the delivery table but died eight days postpartum. One case involved a patient with a hydatidiform mole, but there was no further information submitted on this patient.

One of two deaths attributed to cerebral vascular accident was in a patient with a ruptured aneurysm of the right posterior communicating artery. The other case was incomplete.

Three patients died of cardiac disease. One patient with chronic renal disease died in a TB sanatorium antepartum. Another had a midforceps delivery with vaginal laceration, blood loss, shock, and, terminally, uremia.

There was one death due to a questionable amniotic fluid embolus.

Table VI shows the outcome of the pregnancies.

Table VI

Outcome of Pregnancy

	Non-White	White
Delivered	21	7
Not delivered	7	3
Abortion	3	0
Hydatid Mole	0	1

Of the 28 patients delivered, 18 were live births and 10 were stillborn. Twenty

of the 28 deliveries were attended by a doctor of medicine, two attended by midwives, two unattended, and four unknown.

Table VII shows the time of death in relation to labor.

Table VII

Time of Death in Relation to Labor

Antepartum	7
Intrapartum	2
Postpartum	28
Abortion	3

It is interesting to note in Table VIII, the time of death in the 28 postpartum deaths.

Table VIII

Postpartum Deaths—Time

Day 1	6
Day 2	4
Day 3	2
Day 4	2
Day 5	1
Day 6	1
Day 7	1
Day 8	2
Day 9—15	4
Day +15	2
Unknown	3

Table IX lists the number of prenatal visits in these patients.

Table IX

Prenatal Care

Visits	Non-White	White
0	5	1
1-2	4	2
3-5	5	1
6 or more	1	1
Unknown	15	6

On the basis of the information at hand, an attempt was made to determine which of these 41 maternal deaths were preventable. Seventeen were considered preventable and 24 non-preventable. It must be emphasized that this assignment of preventability was based on ideal circumstances, whereas it is realized that in many situations the physician is laboring under severe handicaps.

This study confirms the fact that South Carolina continues to retain its unenviable position as a national leader in maternal deaths. Hemorrhage, toxemia, and sepsis continue to be the leading causes of maternal death in South Carolina. It is hoped that more of these deaths will be prevented through patient education and improved obstetrical standards.

Diabetes in Pregnancy—A Review of 143 Cases—E. O. Horger III, W. W. Kellett III, and H. O. Williamson (Charleston) Obstet Gynec 30:46-53 (July) 1967.

At the Medical College of South Carolina, 143 pregnancies complicated by diabetes mellitus were reviewed. The incidence of diabetes complicating one of every 111 pregnancies was considerably higher than that usually reported. Five patients aborted, and there were 19 stillbirths and 6 neonatal deaths for a pregnancy loss of 21.0%. Prior to the diagnosis of diabetes, the 88 patients involved in this study had experienced 520 pregnancies with 70 abortions, 33 stillbirths, and 6 neonatal deaths for an identical pregnancy loss of 21.0%.

Fifty-one of the 88 patients were known to be diabetic prior to inclusion in this study. Forty-four were receiving daily insulin injections. Sixty-one percent of these patients required increased insulin dosage during their pregnancies. The 2 patients controlled by diet and the 5 taking oral hypoglycemic agents all required a change to insulin.

By classifying these patients according to the system proposed by Dr. Priscilla White, the severity of diabetes was found to influence the fetal survival. The pregnancy result was better in the younger patients with more recently discovered diabetes.

Diabetics appeared more susceptible to many pregnancy complications, especially toxemia, excessive weight gain, and pyelonephritis, all of which had adverse effects on fetal survival.

Although an increased prematurity rate was noted, the birth weights of infants born to diabetic mothers averaged 520 grams more than infants of non-diabetic mothers. This fetal macrosomia has been found to be a frequent indicator of potential diabetes and in this series was directly responsible for the diagnosis of diabetes in 26 parturients.

Meticulous pre-natal care was stressed in the management of pregnant diabetics. Delivery was usually accomplished at 37 weeks' gestation.

USE AND ABUSE OF THE SUPPORTIVE FRAME IN THE MANAGEMENT OF THE BURNED PATIENT

WILLIAM E. BOMAR, JR., M.D.

In this brief presentation it is not my intention to condemn the various types of supportive frames, such as the Stryker, Bradford, Foster, Circle, Sling, etc., but rather to emphasize care in their employment in the management of burned patients. There is no question about their value in many aspects of the management of these patients. The bedcare of these patients is sometimes inadvertently relegated to a place of lesser importance, and is too often passed on as a more or less menial task routinely accepted by the nursing staff.

However, it behooves us to remember that this, as are so many of our therapeutic tools, is a potentially dangerous instrument and thoughtful consideration should be given to the inherent risks when we request its use.

This subject was conceived when we noticed that on occasion when patients are rotated on one of these frames there is a variable period of adjustment, especially of the pulse, blood pressure, and respiration and sometimes temperature spikes or valleys, nausea and vomiting, apprehension, diarrhea, and other less defined changes, i.e. an obtunded sense of well-being. It seems that there is a similarity here and in those unstable situations closely associated with "cardiac arrest"—i.e. hypotension, hypoxia, sudden extreme stress, excessive manipulation, etc. In an occasional patient these changes were marked and actual cardiac arrest did occur. These latter patients were, of course, quite critically ill from their primary injury. All of the extreme instances were noted in patients in the pre-graft phase except one, who had recently undergone extensive grafting and was undergoing his first dressing change. A blood culture of this patient at that time subsequently revealed Klebsiella sepsis.

Most of us are familiar with the types of apparatus to which we are referring, those essentially involved when, for one reason or another, frequent supine and prone positional changes are desired. Frequently, the use of one of these frames as an aid in splinting is justified without utilizing the rotation and positional aspects.

In attempting to analyze these unexpected adverse occurences we found many facets which collectively revealed a few common denominators which were divided classically into: (1) advantages; (2) disadvantages; (3) indications; and (4) contraindications to use of the frame.

Some of the advantages are; (1) Supportive frames are helpful in the general care and toilet of relatively immobile patients. (2) Dressing changes are easier, especially bivalve or pinned-towel type dressings. (3) They may obviate loss of vasomotor tone. (4) Development of bedsores is lessened. (5) The frames aid in splinting and maintaining the position of function and the prevention of contractures. (6) Patient mobility is greatly facilitated.

We also noticed certain disadvantages. (1) They are not too useful in the very early phase when actual life-threatening conditions have highest priority. (2) Their use predisposes to dislodging various intubations and catheters unless meticulous care is used. (3) When crises do occur they are frequently difficult to manage adequately with patients in a prone position. (4) Without adequate protection bedsores may occur in uncommon areas, e.g. the scapular, malleolar, and occipital regions. (5) Once instituted this

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mode of therapy may lead to a sense of complacency.

As regards to disadvantages, certain contraindications may exist: (1) Unstable blood pressure or pulse, especially persistent tachycardia, arrhythmia, dyspnea, or marked apprehension. (2) Recurrent gastric dilatation, nausea and vomiting, abdominal distention, or diarrhea denotes a precarious position because of, for lack of a better term, increased vagal instability. (3) Overt sepsis. (4) Severe fluid or electrolyte imbalance. (5) Respiratory compromise, i.e. (a) facial edema, (b) pulmonary burn, (c) combined cervico-facial injuries, and (d) tracheostomy or endotracheal tubes. Endotracheal intubation per se does not contraindicate the use of supportive frames, but their reason for being used frequently militates against turning into the prone position. In these situations the prone position should be effected only for specific purposes.

For relative reasons the supportive frame probably should not be used in constricting circumferential chest burns without escharotomy beforehand, insofar as the prone position significantly further decreases ventilatory exchange. Adequate help must be present and resuscitative equipment, suction apparatus and emergency drugs should be nearby. Adequate knowledge of the use of the frame, its limitations and use of resuscitative equipment and emergency procedure is mandatory.

The indications for use of the frames may be outlined in summation: The supportive frame is useful in patients with major burns of areas predisposed to contractures or areas making nursing care extremely difficult. These patients should be near the grafting phase and generally stable. Until the frame can be used in all its versatility, splinting and toiletry should be appropriately employed. The frames should be used only if adequate help is present and only if concerned personnel are knowledgeable in the use of the apparatus.

Bronchoesophagology—F. Johnson Putney, M.D. (Charleston) Arch Otolaryng 86:117-124 (July) 1967.

The increasing use of tracheostomy in many diverse conditions has led to more frequent complications, some of which can be prevented by improvement in operative technique and postoperative care. Mediastinoscopy as a diagnostic aid has some advantages over exploratory thoractomy in that it is simpler to perform and less hazardous than the more formidable chest operation, the complications of which have been minimal and probably will decrease as the procedure becomes more popular. Difficult foreign bodies still constitute a problem in endoscopic removal and external surgical approaches will probably be used more often in the future since the endoscopic foreign body removals have been distributed throughout the country depriving most individuals of the necessary clinical experience to handle the more difficult mechanical problems of extraction.

F. J. P.

THE SEARCH FOR NEW DRUGS IN THE CONTROL OF ACUTE LEUKEMIA

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Family physicians are constantly confronted with the ravages of acute leukemia, especialy among the young, where one-half of all deaths from malignant diseases are due to the acute forms of these blood disorders. Recent reviews of both the domestic and foreign medical literature have shown[12,13] that sulfur drugs, cytosine arabinoside and the guanylhydrazone, Methyl-GAG, are among the most promising of the newer drugs. This review covers 27 clinical reports not previously included.

Sulfur Drugs. Two groups of investigators[4,5,14,15] induced a surprising 92% partial or complete remissions in patients with acute leukemia who were given the thiopurine, Imuran, either alone or with prednisone. These preliminary trials indicate that Imuran is more effective than 6-mercaptopurine, which has been employed extensively in the treatment of both the acute and chronic types of leukemia. The effectiveness of Imuran in acute leukemia approaches that achieved with the combination of vincristine and prednisone,[10] or the success of the four drugs, vincristine, amethopterin, 6-mercaptopurine and prednidone (VAMP)[7] in the management of acute lymphocytic leukemia in children. Heyn, and associates,[8] secured 48% remissions in 58 cases of acute leukemia, following the use of the combination of 6-mercaptopurine and azaserine.

Methyl-GAG. Bernard and associates[1-3] described 38% remissions in 86 patients who received Methyl-GAG (methylglybis guanylhydrazine); this compares with 48% remissions in 266 patients reported in recent reviews.[12,13] The high toxicity of this compound, however, limits its usefulness. Bernard[3] also used a combination of Methyl-GAG with 6-mercaptopurine and amethopterin to induce 54% remissions in 24 patients with acute myelocytc leukemia.

Cytosine Arbinoside. Bernard[3] and Yu[16] adminstered cytosine arabinoside to produce 48% remissions in 58 patients with acute leukemia. In an earlier review[13] 43% remissions were obtained in 67 patients who received this drug.

Discussion. While the above drugs are the more promising in this survey of the literature, there are 13 clinical reports which fail to register any beneficial effects following the use of such new chemotherapeutc agents as antiviral substances, dibromomannitol, 8103 Abbott, bipiperdyl of Lilly, L-asaraginase, etc. Two new nitrogen mustards are also among the drugs which have proved disappointing: Elderfield pyrimidine mustard, which is similar to the much used cyclophosphoramide, gave only one partial remission in 20 children with acute leukemia,[8a] and L-sarcolysin failed to induce any improvement in 27 other children.[9]

If this brief survey of the current control of acute leukemia through chemotherapy presents some of the high hopes and bitter disappointments of clinical trials, it but reflects the moods of many who have fought through two decades of trying to control these blood disorders through the use of more effective drugs. Owen[11] portrays the gloomy picture in a quotation from a 1941 medical textbook: "leukemia is a sentence to sure death, except that there is no court to state the day, and no crime has been committed to merit the sentence." Farber expresses the growing conviction of many chemothera-

peutists in the introductory remarks to a recent conference on acute leukemia:[6] "There is still no cure for acute leukemia in the child or the adult. The deliberations of this conference make it clear that even if the cause or causes of acute leukemia are not discovered and eradicated in the immediate future, it should be possible to control acute leukemia completely by use of chemotherapy and supporting therapy alone. The directions are clearly marked, and the knowledge and tools required for this achievement are at hand." Such words of encouragement are from the man whose discovery of the antileukemic activity of folic acid antagonists in 1948 constitutes a milestone in cancer chemotherapy.

Acknowledgments. The original literature for this study has been made available by the National Library of Medicine and the libraries of Furman University and the Greenville General Hospital.

A list of 43 references on this study may be obtained from Mrs. John R. Sampey, 4 Jones Avenue, Greenville, S. C. 29601.

Dr. Sampey died October 24, 1967.

Spontaneous esophageal perforation: Management of the "intermediate" phase—R. R. Bradham, A. H. Bridgman, S. M. Scott, and R. H. Betts. Ann Thorac Surg 3:6-14, 1967.

It is unusual for patients to survive the acute phase of spontaneous perforation of the esophagus without surgical treatment. Four patients were admitted to one hospital, 15, 10, 14, and 21 days following such an episode and form the basis for this report. All had been misdiagnosed during the acute phase and were treated for some other condition. After the correct diagnosis was established, all patients were operated upon with satisfactory results.

The initial acute phase often mimics such conditions as perforated abdominal viscus, acute coronary occlusion, pneumothorax, dissecting aortic aneurysm, pulmonary embolus, and mesenteric thrombosis. Early diagnosis may be made by detecting small amounts of air in the mediastinum. Definitive diagnosis is established by escape of ingested water-soluble contrast medium into the thorax or mediastinum.

The principles of management of the intermediate phase are discussed and include open drainage of empyema cavities, decortication of the lung, closure of the esophageal rent, and provision for nourishment by the oral route or by feeding jejunostomy. With prompt and adequate treatment, this condition need no longer be as lethal as it once was.

CLINICAL NOTE

THE PRESENT STATUS OF TATTOOING

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All of us are familiar with the accidental tattoo. The most common is perhaps the broken-off lead pencil point in the schoolchild's skin.

Falling off a bicycle or while running is a common way of driving carbon particles of cinders into the skin. The removal of some of these is simple. Of others, especially small scattered particles, very difficult.

The intentional tattoo with figures, flags, colors, is a different matter. The size is usually too much for simple excision. The tattoo artist uses needles, often not sterile, to drive in particles or carbon (blue and black) or of cinnabar (red) deep into the cutis. The recipient is usually artificially buoyed up by his adornment and later, when it is long too late, may regret his new cutaneous decoration.

During the almost continual warfare, hot or cold, which has been present during the past fifty years, there have been many instances where explosions have driven foreign particles into the skin. In Vietnam this has become a definite problem, most cases arising from land mine explosions.

In the past, removal by chemical caustics, by dermabrasion, by keratome, and by surgical excision either with Z-plasty or with grafting, has not always been cosmetically successful. Tattooing on tattooing in an effort to match surrounding skin is subject to such hazards as the different color of the skin in summer and in winter, etc. Occasionally, hypersensitivity develops. This is especially true where cinnabar or mercurial particles are present. Recently, Goldman, et al[1] have been blistering the tattoos with a light beam, the pulsed ruby laser beam. They found that the beam was selectively absorbed in greater quantity by the more highly colored tattoo particles than by the normal skin. In this way, blistering could be limited almost entirely to the tattoo itself. One hundred and sixteen patients were treated with soft white scars resulting. No anesthesia was necessary.

This method is not yet recommended for routine treatment of tattoos but is promising.

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X-RAY FILM OF THE MONTH

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This film of the forearm was taken on a 40 year-old white male who had injured this extremity in an auto accident. Films of other muscular areas in the body revealed similar calcified ellipses, none of which was symptomatic.

These are the pathognomonic findings of cysticercosis.[1] They are due to the presence of the cysticerci of the pork tapeworm (Taenia solium) in the tissues of man. Usually this stage is found in the hog which serves as the intermediate host. The "normal" agent of infection in the human is the pork tapeworm whose proglottids produce the eggs. These eggs reach the soil in the feces where they may remain alive for weeks. When ingested by the hog, they hatch immediately. Following hatching, the embryos penetrate the intestinal wall, reach the lymphatic or circulatory system and become disseminated throughout the body tissues and become encysted. The normal cycle is completed where man eats uncooked infected pork and a tapeworm is once more developed.

Man may, however, act as the intermediate host if ova enter the stomach either from reverse peristalsis bringing the eggs back to the stomach and duodenum or from fecal contamination of food. This form of the infection in man is known as cysticercosis. In man the cysticerci may develope in any soft body tissue with localization in the myocardium, spinal cord, eye or brain producing the most serious consequences. Most patients come under medical care for cerebral symptoms.

The cysticerci encapsulated in muscle may remain alive for years. Only following their death does calcification commence, and it is thought to require at least three years for these areas to become dense enough to be visible on x-ray films.[2] Intramuscularly, the cysticerci are calcified elliptical bodies varying in size from

small dots to 25 mm in diameter. Their long axes are in the direction of the muscle fibers. Intracerebrally, the calcified cysts are round and only a few millimeters in diameter.

While the pork tapeworm has a world wide distribution, it is more often seen where raw or inadequately cooked pork is eaten. While preventable by proper cooking of all pork products, sanitary disposal of human feces prevents infection in the hog and is the essential procedure in control.

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Factors Influencing the Autoregulation of the Cerebral Blood Flow During Hypotension and Hypertension—Glenn W. Kindt, Julian R. Youmans and Otmar Albrand (Charleston) J Neurosurg 26:299-305 (March) 1967.

Many studies have shown that cerebral blood flow is maintained at a nearly normal rate with elevated as well as lowered blood pressures (the autoregulation phenomenon). These studies were done with normal cerebral vascular systems. Since many clinical problems with insufficient cerebral blood flow involve a compromised vascular system, we studied the effectiveness of the autoregulation phenomenon with a compromised arterial tree.

Carotid artery flow rates were measured in 18 goats. Autoregulation kept the rate of blood flow nearly normal during wide variations of blood pressure when the cerebral vascular system was normal. Contrary to the findings with the uncompromised vascular system, after unilateral carotid occlusion the autoregulation phenomenon was no longer effective. Hypotension caused a decrease in the contralateral carotid artery flow rate, and hypertension caused an increase in the carotid flow rate in a nearly linear manner. Studies were then performed on two patients. The results were similar to those in the experimental animals.

These studies show that previous experiments on autoregulation that were done on preparations with normal vascular systems are not relevant to the clinical problems where the patient is suffering from inadequate cerebral blood flow through a compromised cerebral circulation. When a compromised arterial system is present, the autoregulation phenomenon is not effective. Hypotension carries increased risk. Induced hypertension can be therapeutically helpful by increasing cerebral perfusion and preventing hypoxic brain damage.

Phlegmasia Cerulea Dolens: an experimental study—J. Manly Stallworth, R. R. Kletke, and Antonio Ramirez (Charleston) Ann Surg 165: 860-868 and 796 (May) 1967.

Following a ten-year survey in May, 1965 concerning the clinical picture of phlegmasia cerulea dolens with its mortality of 31.9 percent and high amputation rate, an experimental study on 65 dogs was undertaken to analyze the effects of total venous occlusion on (1) the mesentery (for direct observation of the small vessels), (2) the limbs, and (3) to study the relationship of sympathetic denervation.

The immediate results of total venous occlusion of the mesentery and limb were similar in that the venous pressure rose rapidly and within two to four minutes had reached peak levels which corresponded to the mean pressure of the anatomically associated artery. Arterial flow within the totally occluded area showed a rapid fall to zero levels, though the arterial pressure and pulsations remained unchanged. The bowel or skin became intensely cyanotic and swollen. Exudate formed on the bowel and bullae developed in the skin, corresponding to the clinical picture of phlegmasia cerulea dolens.

The total venous obstruction of the involved limb was released at intervals of six, 12 and 24 hours. As a result, the leg blood pressure remained stable until the femoral artery clotted between 12 and 24 hours; the venous pressure returned to normal up to 12 hours after occlusion; the arterial blood flow remained critically low in each category and could be re-established by lumbar sympathectomy only during the initial six hours of venous occlusion. After 24 hours, effective blood flow could not be restored.

Editorials

The Benevolence Fund

In this time of prosperity for the profession, when earnings from practice are in figures unheard of in fairly recent times, it is easy to forget that there are some older members of our fellowship who have not fared as well as the average doctor of today. In the tradition of our guild, it seems proper that we ourselves do what we can to help our fellows in distress, rather than turn aside with the thought that some of the many welfare programs will take care of their needs.

There are a number of societies organized for the purpose of accumulating funds to be used to assist physicians or their families who have fallen on evil days. Some of these give substantial financial help, some not much more than nominal sums, depending on their resources, which in turn depend on the interest that can be sustained in maintaining and enlarging these organizations.

The "Widows and Orphans" Society in Charleston, actually a state society, (The Society for the Relief of the Families of Deceased and Disabled, Indigent Members of the Medical Profession of the State of South Carolina) is an example. Never a rich group, it manages to dispense modest sums to a number of persons. A similar society in New York State in 1966 gave aid to 105 physicians families and expended nearly $150,000. The Benevolence Fund of our own Association was instigated by Dr. W. Atmar Smith when he was president of the Widows and Orphans. It has had healthy support from the Association, the Auxiliaries, and other sources. However, it has never reached an impressive sum, and most of its income is expended almost as fast as it comes in. It has been of great benefit to a relatively small number of physicians.

If this fund could be built up to a principal sum of material size, it would stand as a more readily available and broader source of help. In these times of affluence, it would seem that we physicians could contribute more to this most worthy effort, and pray that none of us may ever be a beneficiary.

* * *

Psychiatric Doubts

The field of psychiatry has always been rather unclear to us. Perhaps a natural obtuseness and skepticism, and a certain mean enjoyment of the numerous jibes made of its practitioners have kept our confidence low and our confusion high.

But we are not alone. No less a person than the president of the American Schizophrenia Foundation has been casting aspersions on psychiatry, saying that high fees and poor results are shaking public confidence, that there is "a growing suspicion in many circles that the profession is not providing answers to the epidemic of mental illness which is now gripping the nation". As commentary, he cites the growth of the numerous non professional organizations such as Alcoholics Anonymous, including his own foundation, which follow roads different from those of the psychiatrists. He speaks of the divergence of theory and practice in the field, and the visible and often radical differences among the practitioners, and is clearly unhappy over the status quo.

These criticisms do not come from a psychiatrist, but from a layman (the former might be quickly judged insane by his peers). Perhaps they carry some worthwhile weight. At least they deserve an answer from the psychiatric side, firmly embattled behind its barricade of interlocking couches.

STATE DEPARTMENT OF PUBLIC WELFARE

The South Carolina Medical Assistance Program

Title XIX of the Social Security Act provides for grants to states for medical assistance programs. The purpose of this title is to enable states to provide a more effective medical assistance program for recipients of money payments and extend its provisions to additional persons with low incomes. The State Department of Public Welfare has submitted a plan to the Department of Health, Education, and Welfare to extend and expand its medical assistance programs. Under the new plan, medical assistance will be available to the following individuals as "categorically needy" with medical care and services available in the same amount, duration, and scope for:

a. All individuals receiving assistance under the state-approved plans for Aid to the Needy Aged, the Needy Blind, the Disabled, and Families with Dependent Children.

b. All residents of the state who would be eligible for assistance under one of the other state plans except for durational residence requirements for the particular program.

c. All persons who would be eligible for assistance under one of the other State plans except for any other eligibility condition in such plan that is specifically prohibited in a program for medical assistance under Title XIX.

d. All children under 21 who are or would, except for age, or school attendance, be dependent children under the State's approved plan for Aid to Families with Dependent Children.

e. All children in foster home care for whom public agencies are assuming financial responsibility.

f. General assistance recipients, and essential persons in the assistance households who are categorically related.

g. Persons in a medical facility who, if they left such facility, would be eligible for financial assistance under another of the State's approved plan.

The Plan provides for the following items of medical and remedial care and services, and the amount and or duration of each:

(a) *In-patient Hospital Service* (other than services in an institution for tuberculosis or mental diseases). A maximum of 40 days per fiscal year will be provided if the hospital is licensed by the State Board of Health and certified under Title XVIII (Medicare) of the Social Security Act.

(b) *Out-patient Hospital Service* includes the various items or services furnished to an out-patient by a hospital licensed by the State Board of Health and with an organized out-patient department that meets the requirements of Title XVIII (Medicare) of the Social Security Act.

(c) *Other Laboratory and X-Ray*—Laboratory and x-ray service provided by a licensed medical practitioner in a facility directly, or under his supervision, that is qualified to meet the conditions to participate under Title XVIII (Medicare) of the Social Security Act.

(d) *Skilled Nursing Home Service* (other than services in an institution for tuberculosis or mental diseases) for individuals eighteen years of age or older. Those services furnished by a skilled nursing home maintained primarily for the care and treatment of in-patient with disorders which are provided under the direction of a physician within the scope of his practice as defined by law. Skilled nursing home care will be available to a patient as long as the physician certifies he is in need of such care.

(e) *Physicians' Services*—Physicians' services are those services provided by a physician licensed under state law to practice medicine, whether furnished in the home, office, hospital, nursing home, or

elsewhere. Physicians' services will be reimbursed on the basis of usual and customary charges. Billings will be directed to the agency. It is expected that all billings will clear through a fiscal agent. The patient will have freedom of choice in selecting his physician.

(f) *Dental Service*—Dental service is any diagnostic, preventive, or corrective procedure administered by or under the supervision of a dentist in the practice of his profession. These services will be limited to emergencies only.

(g) *Prescribed Drugs* — Precribed drugs and medicine are those simple or compound substances or mixtures that are prescribed as such, or in acceptable dosage forms for the care, mitigation or prevention of diseases or health maintenance, by a licensed physician within the scope of his professional practice as defined by state and federal law. Prescribed drugs will be limited under a formulary being developed by the South Carolina Medical and Pharmaceutical Associations.

(h) *First Three Pints of Whole Blood*— Provided the hospital cannot obtain replacement donations.

During the first year the program will cover approximately 75,000 persons and cost $16,000,000, of which $3,200,000 will be state funds.

It is expected that this program will be operative within the next thirty days.

Arthur B. Rivers, State Director

THE STATE BOARD OF HEALTH, THE DEPARTMENT OF PUBLIC WELFARE, AND TITLE XIX

In order that all interested agencies and representatives may be fully informed as to the implementation of the medical aspects of Title XIX of the Social Security Act in this State, the "Agreement between the South Carolina State Board of Health and the South Carolina State Department of Public Welfare with Regard to the Implementation of Title XIX" is presented here.

The State Board of Health did everything in its power to get the medical aspects of this program made the responsibility of the official State health agency, namely, the State Board of Health. Failing in this, the Board believes that the attached Agreement is the best compromise to which it could agree, and one with which it can work.

Objectives:

(a) To establish and maintain comprehensive continuous family centered medical care of high quality when and where needed throughout South Carolina for persons found by the Department of Public Welfare to be eligible for the benefits provided under Title XIX, including preventive, diagnostic, curative, and rehabilitative services to attain or retain independence or self-care, or to attain their full potential for optimum growth and development, mental, physical, and emotional.

(b) To ensure maximum participation by all vendors of medical care and health services, including individuals, and institutional and non-institutional sources of care, both public and private.

(c) To ensure that recipients of medical assistance receive a standard of care of at least as high quality as that normally available to all other persons in the locality, regardless of ability to pay and to provide comprehensive care with appropriate continuity of care.

To accomplish these objectives, the South Carolina State Department of Public Welfare and the South Carolina State Board of Health agree that the services administered by the State Board of Health shall be utilized to the maximum degree possible and in coordination with the medical care and services provided by the State Department of Public Welfare under the State plan for medical assistance under Title XIX of the Social Security Act in accordance with the following provisions:

1. The provision of services under this agreement shall be in accordance with the State plan for medical assistance, with Title XIX of the Social Security Act, and with the policies and interpretations contained in the Handbook of Public Assistance Administration, Supplement D, "Medical Assistance Programs," and in related regulations and policies.

2. The State Department of Public Welfare shall retain its requisite ultimate authority for exercising administrative judgment in the Statewide administration of the Title XIX plan. The State Board of Health is not authorized to

change, disapprove, or delay action on any administrative decision of the State Department of Public Welfare, or to otherwise substitute its judgment for that of the State Department of Public Welfare as to the application of policies, rules, and regulations promulgated by the State Department of Public Welfare.

3. Both Agencies will continue the following existing cooperative activities:
   a. Reciprocal referral service
   b. Exchange of reports and service
   c. Coordination of plans for individuals and families
   d. Joint evaluation of policies that affect the cooperative work of the two agencies
   e. Joint planning for any changes that may be needed to achieve their joint goals
   f. Continuous liaison and designation of staff responsible for liaison activities at the State and local levels.
4. The State Board of Health will participate to the extent needed by the State Department of Public Welfare in the estimation of costs incurred for necessary medical or remedial care by medically indigent persons.
5. The State Board of Health will provide necessary consultation and assistance to the State Department of Public Welfare in the following areas related to assurance of high quality of care and services:
   a. Provision of specialist and consultant medical service and setting standards for these services.
   b. Provision of necessary transportation for recipients to and from health services.
   c. Development and implementation of standards for medical and remedial care and services of similar quality to the standards used in crippled children's program.
   d. Planning and promoting broadening of scope of medical and remedial care and services toward the goal of comprehensive medical care for all families and individuals whose limited income and resources are insufficient to purchase them.
   e. Efforts to upgrade and extend needed institutional care.
6. The State Board of Health will provide necessary consultation to the State Department of Public Welfare in the establishing of schedules of compensation for services commensurate with "reasonable cost" or "reasonable charge."
7. The State Board of Health will provide assurance to the Department of Public Welfare that standards of medical and remedial care are being met and give assurance as to certification of providers of services and to the high quality of care and service being rendered by the following:
   a. Hospitals
   b. Skilled Nursing Homes
   c. Home Health Agencies
   d. Independent Laboratories
8. The State Board of Health will provide the State Department of Public Welfare data needed for program planning, evaluation, reporting and accounting purposes.
9. The State Board of Health will inform its local officers of the provisions of the State medical assistance plan and encourage their participation in its operation. They will help inform potential applicants about the medical assistance program, and when properly authorized, may make application for persons unable to act for themselves.
10. The State Department of Public Welfare may refer persons eligible for medical assistance under Title XIX to the State-aid cancer program, and other health programs administered by the State Board of Health for services which these programs provide. The State Board of Health will provide covered services to those referred within the limitations of available resources.
11. The State Department of Public Welfare will refer all children with the kinds of medical conditions for which the crippled children's program can provide services to the County Health Department in the county of residence for initial processing of applications for admission to the crippled children's program. The State Board of Health will accept such children to the extent the services of its crippled children's program allow. If funds available through crippled children's program appropriations are not sufficient to provide care for all the children referred by the Title XIX agency, payment for treatment will be made by the Title XIX agency for those eligible under the Title XIX plan. Title XIX funds will be used for this purpose whenever the State Board of Health determines that the amount of Title V funds available may be insufficient to pay for services under the crippled children's program for all children anticipated to require such services. When Title XIX funds are to be used for eligible children, the State Board of Health will forward bills received from providers of service to the State Department of Public Welfare. The State Department of Public Welfare will pay these bills direct to the providers of service at the same rates payable by the State Board of Health for crippled children not eligible for Title XIX benefits, except when other rates of pay are required by the provisions of Title XIX and its implementing regulations.

    Diagnostic services under the crippled children's program will be made available by the State Board of Health without charge to all children needing them and no Title XIX funds will be used to pay costs of diagnostic services.

If instances occur where the crippled children's program finds it cannot accept for services all eligible children referred by the Title XIX agency, the crippled children's agency will provide assistance in determining the kinds of care needed and the resources available.

12. The State Department of Public Welfare shall reimburse the State Board of Health on a monthly basis for the cost of providing the following services in accordance with the provisions of the Handbook of Public Assistance Administration:
    a. Medical assessment of medical issues involved in appeal hearings if such assessment is necessary.
    b. Evaluation of hospitals, independent laboratories, skilled nursing homes, and home health agencies which are not certified for participation under Title XVIII of the Social Security Act.
    c. Evaluation of the utilization and quality of medical and remedial care and services provided under the State medical assistance plan; and (at periodic intervals) providing notification and recommendations relating thereto to the Department of Public Welfare.
    d. Assistance in conducting in-service training so that direct service workers and their supervisors will be knowledgeable about health problems and the remedial care and services provided under the State medical assistance plan.
    e. Services of professional medical specialists and consultants when directly involved in the administration of the Title XIX medical assistance program.
13. The State Board of Health shall submit a monthly statement of its cost of providing the services set forth in Section 12 to the State Department of Public Welfare. At least six weeks prior to the beginning of each quarter, the State Board of Health will submit to the State Department of Public Welfare an estimate of the cost of providing such services for the quarter.
14. This agreement shall be reviewed by the State Department of Public Welfare and the State Board of Health at least annually and amended as necessary.
15. This agreement shall be binding upon the State Department of Public Welfare and the State Board of Health after the date it becomes effective. It may be terminated by either agency by written notice to the other agency ninety days prior to termination.
16. This agreement shall become effective upon approval by both agencies.

Dated at
Columbia, South Carolina
November 20, 1967

South Carolina State Department of Public Welfare
(Signed)
Arthur B. Rivers, State Director
South Carolina State Board of Health
(Signed)
E. Kenneth Aycock, M.D., State Health Officer

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50 YEARS AGO

The Journal of the South Carolina Medical Association

February 1918

The Annual Meeting in Aiken will concern itself largely with problems of military medicine.

The State Board of Health established a Child Welfare Bureau. A Bureau for registration of birth was emphasized.

The Florence Infirmary and Training School for Nurses was advertised.



The Tuomey Hospital Medical Library has been renamed in honor of **Dr. Davis D. Moise** in recognition of the Sumter physician's outstanding service to the community and efforts as exchequer of the library. **Dr. Jesse J. Floyd** has opened medical practice in Columbia in gynecology and obstetrics at 2757 Laurel Street. He was graduated from the Medical College of Georgia and completed his internship at Spartanburg General Hospital. His residency training was at Millcrest Medical Center, Tulsa, Okla., and Columbia Hospital. **Dr. Prue Wilson Kelly**, a native of Belton, has assumed his duties as Radiologist at Murray-Calloway County Hospital in Kentucky. The new superintendent of the Crafts-Farrow State Hospital for the mentally ill is **Dr. Thomas G. Faison.** Dr. Faison, 61, joined the staff of the state hospital in 1964 after a career in the U. S. Army medical service and two years as a national consultant for the American Cancer Society. He was post surgeon and commanding officer of the base hospital at Fort Jackson from 1960 until 1962. **Dr. Edward L. Hay** has opened an office for the practice of orthopedic surgery at 114 Rutledge Avenue, Charleston. The Columbia Clinic, internal medicine, has announced the association of **Dr. Skottowe B. Fishburne Jr.** in hematology. **Dr. D. O. Royals**, who has been a resident in orthopedic surgery in the Mayo Graduate School of Medicine, University of Minnesota at Rochester, has left that city and will be located in Greenville. **Dr. C. E. Aimar**, administrator of Coleman-Aimar Clinic, Darlington, was elected to the Darlington City Council this fall.

Officers of the Columbia Medical Society were elected in December. The officers are **Dr. Joe E. Freed**, president-elect; **Dr. Paul T. Hopkins**, vice president; **Dr. Foster Marshall II**, secretary; **Dr. M. Tucker Laffitte Jr.**, treasurer and **Dr. Donald E. Saunders Jr.**, editor of The Recorder. **Dr. D. Strother Pope**, named president-elect in 1966, is the new president.

Physician's Responsibility to the Community. John M. Fleming Amer J Obstet Gynec 87:289-92 (Oct.) 1963.

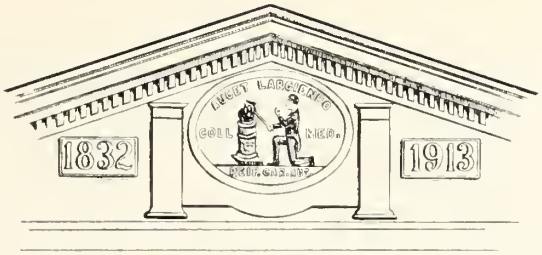
It seems evident that the physician has many responsibilities to the community. The first and most obvious one is that he should perform his functions as a physician to the very best of his ability. Only in this way can the high honor and esteem in which the profession is now held be handed down unimpaired to future generations and physicians. What I would particularly like to point out now, however, is the physician's responsibility to the community in his role as a citizen. Leadership in community affairs is a natural role for the physician. He need not necessarily be a top-rank office holder in the community, but through his willingness to participate, to give of his time, talents, and efforts, he can inspire confidence in others and a desire on their part for community leadership.

1968 EASTER SEAL CAMPAIGN

The 1968 Easter Seal Campaign will begin March 1 and continue until April 14, Easter Sunday.

A widespread appeal for funds will be made by hundreds of state and local Easter Seal affiliates to finance treatment and rehabilitation for crippled children and adults.

Last year, nearly a quarter million handicapped persons received help from Easter Seal societies, but needs of the handicapped and costs of providing expert professional care are rising, and more money than ever before will be needed to serve the handicapped during 1968.



Medical College of South Carolina

The Medical College of South Carolina took several giant steps toward the implementation of complete university facilities in Charleston during the month of December.

On December 8, two proposals were approved by the Medical College's Board of Trustees which would make the Medical College a full-fledged university. The first proposal was for the formalization of a School of Liberal Arts; the second was for approval of university status for the Medical College. Both proposals were unanimously authorized and approved by the South Carolina Commission on Higher Education on December 7 at a meeting in Conway.

Approval of the two groups made the College of Liberal Arts a reality. The second proposal to raise the Medical College to full university status will be presented along with a proposed code of laws to the General Assembly. The code of laws which would formalize the structure change of the Medical College, will receive prior approval of the Board of Trustees.

Dr. William M. McCord, president of the Medical College, said that the Medical College is seeking university status to meet present and growing liberal arts needs "as well as to provide new courses in undergraduate and graduate education in whatever courses of study may be needed by the people of South Carolina.

"We do not plan to be solely a medical or health-oriented university, though, of course, this will always be an important part of our mission in South Carolina higher education. As the undergraduate school or schools are implemented or expanded, they will comprise a total university operation," Dr. McCord said.

"We will cooperate with other institutions in the area in any way possible to provide the best of our educational resources for the people of South Carolina." Dr. McCord further said, "Although we feel strongly that other educational institutions in the area should participate in university education, the decision must be their own."

Reorganization of the Medical College into a university will not immediately affect the overall operation, Dr. McCord stated. Dr. McCord, along with Mr. J. Edwin Schachte, Jr., chairman of the Medical College's Board of Trustees, said the change would not immediately be a visible one.

"We are in effect already functioning as a university," they said, "and are asking the legislature for formalization."

"As plans are made and developed, we will be guided by Mr. John K. Cauthen, chairman of the Commission on Higher Education, and the other members of the Commission," Dr. McCord and Mr. Schachte said.

Dr. McCord said that Mr. Cauthen considers the action in line with the Commission's announced intention of giving first priority in medical education to the development of the Charleston institution to its fullest potential, both quantitatively and qualitatively, before launching a second medical college. "We want to be sure," Mr. Cauthen said, "that the Medical College is headed in the right direction before our resources are diluted on a second medical college."

No name has been chosen for the institution as yet, but Dr. McCord said several were under consideration.

Construction bids are now being called

for on two new buildings at the Medical College. The bid opening is set for February 15. Dr. William M. McCord said that groundbreaking for the Basic Sciences-Dental School Building and the Student Activities-Administration-Library Building will be set at that time.

When the two new buildings are completed, expansion will be possible to 102 medical students per class and 48 dental students per class. Construction of the new buildings was made possible by a $8.25 million grant from the Dept. of Health, Education, and Welfare announced in December, 1966, and by matching funds approved by the state legislature in 1965. The new complex has been designed by Lyles, Bissett, Carlisle & Wolff, Architects/Engineers/Planners of Columbia.

To be located on the former site of Porter Military Academy, the three-story Student Activities-Administration-Library Building and seven-story Basic Sciences-Dental School Building will include a total of 390,000 square feet of space.

Dr. McCord has announced the appointment of **Dr. Glenn G. Thomas** as Dean of the School of Liberal Arts. Dr. Thomas is former Associate Dean of the School of Allied Health Sciences.

Dr. Henry B. Gregorie, Jr., attended the 79th annual session of the Southern Surgical Assn. at Hot Springs, Va., Dec. 3-6. Dr. Gregorie spoke on "Hematoporphyrin Derivatives Fluorescence in Malignancies."

On Dec. 9-12, **Dr. H. B. Othersen** spoke to Pediatric and Pediatric Surgical Group at UCLA Medical Center on "Pancreatitis in Children."

Dr. Melvin H. Knisely was the second speaker in the Bioengineering Series presented by the Univ. of S. C. and its College of Engineering in the Physical Sciences Center at U. S. C. on Dec. 5. He spoke on the topic of "Some Problems in the Pheology of Blood in Health and in Disease."

Dr. Elsie Taber was the banquet speaker at the National Convention of Alpha Kappa Gamma, honorary leadership sorority for college girls, in Nov. She spoke on the subject of "Careers for Women, Particularly in Science."

HOSPITAL NEWS

An annual grant of $100,000 is being requested from the U. S. Department of Health, Education and Welfare by the S. C. Retarded Children's Habilitation Center, Charleston. The money will be used for establishment of a developmental training team for the severely and profoundly retarded.

Plans have been announced for the construction of a $485,637 vocational rehabilitation facility at Greenville General Hospital. Anticipated completion date for the unit is July 1968.

York General Hospital's new Chronic Unit opened in November. The 40 bed unit offers two distinct types of care. Twenty beds will be used for chronic patients patients requiring frequent medical care and nursing supervision; the remaining twenty will be used for long-term patients whose condition requires little more than skilled nursing care.

The Board of Trustees of Anderson Memorial Hospital, Anderson, has adopted a report calling for a four phase $12 million building program over the next ten years. Bed capacity of the hospital will be increased from the present 425 to 800. The first phase of the program, already approved for Hill-Burton funding, will be a diagnostic and treatment wing, and an intensive care section. In addition to long-range building plans, the report also proposed an expenditure of $319,000 for a computer program with possible participation in the operation of a regional hospital computer center.

Oconee Memorial Hospital, Seneca, opened a School of Radiologic Technology on January 2, 1968. The school will offer a 24-month course leading to certification as a radiologic technician or X-ray technician.



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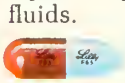
Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.

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Dosage: 50-200 mg. (¾-3 grains) at bedtime.

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A SHORT LEXICON OF NON-MEDICAL MEDICAL TERMS

For beginning medical and paramedical personnel

ROBERT E. QUINN, M.D.
Georgetown, S. C.

The following lexicon has been compiled with considerable painstaking research for the benefit of young workers entering all fields of medicine. It may also serve as a refresher for those more experienced who have never given thought to the study of medical communication.

In this time when the art of communication is second only to the statistic in the practice of medicine, it was felt that a guide to some of the commoner non-medical medical terms might be useful.

These terms have been garnered from actual patient interviews without regard to race or creed. It is hoped that this compendium may inspire others to further research in the field, and the reader is cautioned against regarding it with levity, since this is known to detract from the innate dignity of the sanctified and high calling of medicine.

In almost all cases, the term being defined has been used in a short sentence for the purpose of clarity. It is the lexicographer's hope that in those rare cases when the laboratory or radiology department does not provide a diagnosis and the physician is put to the task of talking with the patient, some acquaintance with the odd terms he may use will be helpful in reaching a conclusion as to what is actually wrong with him.

Lastly, for those who may become interested in creating their own lexicon, which indeed may vary greatly by section of the country, my admonition is in listening to patients' medical terminology that "things are seldom what they seem."

Ankyhol
C_2H_5OH

"I wanted to rub the baby with ankyhol, but my husband had done drunk it all."

Bad Blood
A positive serological test for syphilis.

"I had seven hip shots for bad blood at the clinic. Is that why I can't get pregnant?"

Body
A thrombosed external hemorrhoid.

"I'd rather stand up, doctor. My body has been dropped for three days."

Bulk
To eructate, also to regurgitate (see cascade) (also Burk)

"Doctor, I have so much gas I bulk my food all the time."

Bunk
To lean over in knee-chest position.

"Bunk over and let the doctor see how your body is dropped."

Cadillac
A lenticular opacity.

"The head doctor told me I had a cadillac in both eyes."

Cascade
To regurgitate.

"The baby cascade twice in the waiting room before he could see you."

Castrate
To pass a rubber tube into the bladder.

"Send the orderly, nurse, I need to be castrated because I can't pass my water."

Clean
With operation, implies removal of all female organs.

"I had a corrupted navel fixed and a clean operation."

Clod
A coagulated mass of blood.

"I been passing clods all day."

Conversion
A seizure, usually grand mal.

"Every time the baby has a fever, he has a conversion."

Corrupted

To have a hernia.

"The baby has a corrupted navel."

Courage

Libido, usually in the sense of decreased.

"My courage is run down and I need a shot to build it up."

Crotch

A device for aid in walking when disabled.

"Ask my husband to fetch my crotch, so I can get about."

Dark Eye

A syncopal attack, frequently hysterical in origin.

"I get so upset at the funeralizing, I get the dark eye four times."

Depository

A semi-solid medication for rectal or vaginal insertion. Also sometimes referred to as "repository".

"I don't know how to swallow them depositories, so . . . ."

Dilly-Dally

A cardiac glycoside discovered by Withering.

"I been taking them dilly-dally tablets every day for my heart."

Extended

Flatulent, hypertympanitic, filled with intestinal flatus.

"I am so extended I am about to bust."

Fresh

An indescribable taste in the mouth, said to indicate fever.

"I had such a fresh taste in my mouth I knew I had inward fever."

Hassle

To have respiratory distress.

"I was hassling for breath all night long."

Hunker

To bunk, only more so.

Infantigo

A pyoderma most frequently seen in small children.

"The baby has the infantigo and I washed him in Boraxo, but it didn't do no good."

Inward Fever

An ill-defined clinical syndrome, opposed, one supposes, to "external fever" which can be measured with a clinical thermometer. See "Fresh".

Me One

I alone.

"Ain't nobody home now but me one."

Mold of the Head

Sagittal cranial suture.

"I have a headache right in the mold of the head."

Nature

Sexual potency, usual usage when lost or deficient. See "Courage".

"I am bout run down in nature and home dissatisfy."

Palate Dropped

Edema or inflammation of the uvula.

"My palate is dropped and I need a shot of penzillium."

Peg

An erupting tooth in an infant.

"The baby is fussy and feverish because she cuttin' peg."

Pided (Pyded?)

A diffuse bluish macular discoloration of infants more apparent to the mother than to the physician.

"The baby's skin is pided and I know there is something wrong with her heart."

Pone

A swelling due either to inflammation or tumefaction.

"When my back hurts it feels like a pure pone is swelled up on it."

Prostrate

A paraurethral gland in the male.

"My prostrate is bothering me and my nature is down."

Purse

An inflammation, particularly urinary. Also sometimes "Pulse".

"I have had purse on the kidneys since I was six months old."

Sprangle

To spread (as a pain), particularly of emotional origin.

"I have a pain in my heart that sprangles out over my whole body."

Strain

A urethral discharge commonly caused by the gonnococcus and commonly supposed to result from heavy lifting.

"I get a strain lifting up the corner of the pig sty."

Striving

To grow properly.

"My baby is pided and is cutting peg and she just isn't striving."

Tarrify

Severe itching.

"I have a rash that tarrified me all night."

Testes

Laboratory examinations.

"I want you to put my wife in the hospital so the insurance can pay you to run some testes on her."

Trash

A monilial infection of the tongue or mouth (thrush).

"The baby have the trash in the mouth and I wrench it out with Chlorox."

Weasel

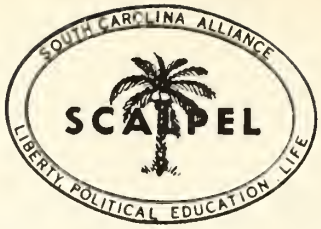
Asthmatic rhonchi.

"The baby have a weasel on the chest."

Working

A cathartic, or the need for the same.

"I needed a good working out, so I took some strong working medicine."



?? CAN BOTH OUR STATE AND NATIONAL MEDICAL LEADERSHIP BE ALL WRONG ??

(SCALPEL DOESN'T THINK SO!)

WESLEY W. HALL, M.D. Chairman of the AMA Board of Trustees, in June 1967, reporting to the House of Delegates:

"The AMA Board believes that never before has the medical POLITICAL ACTION COMMITTEE movement more strongly deserved and needed your support and the support of all members of the profession and the state and county medical societies. There should be maximum voluntary participation in the national and state PAC's as independent organizations established under the law by the entire profession and especially by its leadership."

MILFORD O. ROUSE, M.D., President of the AMA, has urged us to join and support SCALPEL and AMPAC.

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(Remit $20.00 with your 1968 SCMA dues)

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THE MONTH IN WASHINGTON

President Johnson signed into law the social security legislation which included changes in Medicare and Medicaid advocated by the medical profession.

It provides for a record high minimum 13 per cent increase in cash benefits for 24 million Americans, starting in March. Beginning April 1, one dollar a month of the increase will be withheld from the checks of those participating in voluntary plan B of medicare which covers part of physican fees and other medical services other than hospitalization.

The total premium for Plan B insurance is now $6 a month, half of which is paid by the federal government. Beginning April 1, the premium will be increased to $8, with the government paying $4 and the participant $4.

According to HEW, about 20 cents of the $1 increase was needed to cover costs which were originally underestimated. Another 25 cents would cover expected increase of use under the program. An anticipated 5 per cent increase in physicians' fees would account for another 25 cents, HEW said.

The social security taxable base also was increased, effective January 1, from $6,600 to $7,800. The tax rate for this year will remain the same as under the

old law, 4.4 per cent on both the employee and employer and 6.4 per cent on self employed. Tax rate increases are set for subsequent years through 1987.

Changes in Medicare and Medicaid include:

Medicare

—Payment of physician fees is authorized either to the patient on the basis of an itemized bill, either unpaid or receipted as paid, or to the physician under the assignment method.

—Payment is authorized for full reasonable charges for radiological or services furnished by physicians to hospital inpatients.

—Hospital outpatient diagnostic services are transferred from the hospital insurance program (Plan A) to the supplementary medical insurance program (Plan B). The change was designed to simplify the procedure for paying benefits for hospital outpatients.

—The requirement of physician certification of the medical necessity for admission to general hospitals and for hospital outpatient services was eliminated.

—Medicare beneficiaries are given a lifetime reserve of 60 additional days of hospital care after the 90 days covered in a spell of illness. The beneficiary must pay the first $20 per day for the additional hospitalization.

—The Secretary of HEW was directed to study and report to Congress by January 1, 1969, the effects of covering drugs under Medicare and of establishing quality and cost standards for drugs provided under social security health programs.

—Services of podiatrists are authorized under Medicare to the extent that a state's law permits, but routine foot care is not covered.

—Outpatient services furnished by physical therapists are authorized within certain limitations.

—The Secretary of HEW was directed to study and make recommendations of adding services of chiropractic and optometrists to Plan B.

—Payment is authorized under Plan B for diagnostic x-rays taken in a patient's home or a nursing home.

Medicaid

—States are limited in setting eligibility income levels for federal matching purposes.

—States are given until January 1, 1970, to buy-in Medicare Plan B insurance for aged medicaid beneficiaries.

—States are authorized to make direct payments to Medicaid beneficiaries for physicians' and dentists' services if the beneficiary is not receiving cash assistance.

—States are permitted to select either the five basic health services, or seven out of the 14 authorized, for the medically indigent. The basic five must be provided for those receiving welfare cash benefits. The basic five are: inpatient hospital services, outpatient hospital services, other laboratory and x-ray services, skilled nursing home services and physicians' services.

—States must license administrators of nursing homes and set minimum nursing home standards if these institutions are to be eligible to participate in the Medicaid program.

—States must establish methods and procedures to safeguard against unnecessary utilization of health care services and to assure that payments for such services and drugs do not exceed reasonable charges.

Under the program for Aid to Families with Dependent Children (AFDC), states now must offer birth control services to appropriate beneficiaries with acceptance on a voluntary basis. Authorizations for federal financial aid for maternal and child health programs are increased. Services of optometrists are added to child health programs.

* * *

Dr. James L. Goddard, commissioner of the Food and Drug Administration, estimated that about 300 drugs, marketed under 1,600 brand names, will be forced off

the market because of ineffectiveness for treatment of medical conditions.

An evaluation of some 3,000 drugs placed on the market from 1938 to 1962 was started in June, 1966. It is being conducted by 29 panels of 200 medical and pharmaceutical specialists under the direction of the National Academy of Sciences-National Research Council. With the first panel reporting in January, the last report is due in mid-1969.

The FDA assigned the evaluation to the academy following passage of the Kefauver Drug Law in 1962. The law's main thrust was to give FDA power to pass on the efficacy as well as the safety of drugs marketed after 1962, but a provision authorized the government to review drugs already on the market.

* * *

The federal government has licensed a live, attenuated mumps virus vaccine especially recommended for adolescent and male adults who can become sterile from the relatively innocuous childhood disease.

The vaccine, developed over a five-year period by the Merck, Sharp and Dohme Research Laboratories, was not recommended for routine use in infants and young children pending development of more information in the duration of the immunity it provides.

Dr. William H. Stewart, U. S. Surgeon General, said excellent protection against naturally occurring mumps has been observed for the first year after the single-infection live vacine.

"But limited data on natural exposure during the second year indicate continuing protection although additional observation will be required to determine the duration of immunity protection," he said.

Annual Meeting

South Carolina County Medical Society Officials and Other Interested Physicians

Wade Hampton Hotel, Columbia, S. C.

Sunday, February 18, 1967

Tentative Program Includes Discussions On Administration of Title XIX; the Heart, Stroke and Cancer Program; Health Insurance (H.E.W.) and other Federal Programs.

Meeting Sponsored by the Public Relations Committee of the South Carolina Medical Association

Luncheon as guests of the Association

Please notify Mr. M. L. Meadors, 301 North Coit St., Florence, S. S. 29501 if you plan to attend.

WEIGHT REDUCTION CLINICS

J. DECHERD GUESS, M.D.
Greenville, South Carolina

In late December, there was published in various newspapers an AP dispatch which read in part as follows:

> A senate investigation was announced Tuesday into the diet pill industry when Senator Phillip A. Hart said "a patient's health and purse can often be reduced as rapidly as his weight (by use of these pills)".
>
> Senator Hart . . . was reported to have said that a six months staff inquiry has turned up strong indications that:
>
> "Drug suppliers specializing in diet pills recruit doctors into the weight-reducing field as an implement manufacturer might seek dealers, sometimes promising physicians yearly incomes of $100,000 to $300,000.
>
> Mass production handling of patients by many obesity specialists precludes the kind of careful medical attention essential to safe use of diet drugs".

In a letter to the writer, dated November 2, Mr. Oliver Field, of the Department of Investigation of AMA stated in reply to an inquiry by me:

> The AMA House of Delegates, at its meeting last June, adopted a resolution on the so-called weight reducing specialists. (This resolution will be referred to later.) The utilization of dangerous drugs such as thyroid, digitalis, thiazine diuretics, amphetamine, and barbiturates apparently causes harm to certain patients .

It is quite evident that the matter of weight reduction practices was fully discussed at the June meeting of AMA. A resolution (Resolution No. 68) was offered. It was not adopted, but a substitute resolution was passed. The substitute resolution was titled, "Statement of Policy Regarding Weight Reduction Practices", and it was ordered "disseminated through the various media". The statement read in part:

> There is no ethical or legal ruling which would prevent a physician from limiting his practice to the treatment of obesity, but this is not a recognized speciality. Since obesity may be only a sign, many disciplines of medicine may be involved in proper treatment.
>
> Any physician particularly concerned with the treatment of obesity should recognize that his practice and the care of patients should follow all professional and ethical rules governing the practice of medicine.
>
> A physician should not advertise his services; he should not exploit the patient in any way. The use of drugs must be carefully controlled by the physician.
>
> The treatment of obesity cannot be isolated from concern for co-existing diseases such as diabetes and heart disease, and requires very definite diagnostic skills and close supervision of the patient. It is vitally important that physicians working in this area have a thorough knowledge of all aspects of internal medicine. The methods which a physician uses in this area should be based on all available knowledge of human physiology and metabolism and on current information concerning the patient's responses to weight reduction. There are health hazards in weight reduction and these should be thoroughly understood and appreciated.

Thus spoke the House of Delegates of AMA.

The writer is not familiar with what gave rise to the discussion of weight reducing clinics, nor what was the intent of Resolution 68, which was put aside by the substitute resolution, nor why it was put aside, presumably by a reference com-

mittee. Nor does he know the temper of the discussion which ensued.

However, it would appear that the entire question was a hot potato, too hot to handle except in most general terms, with a resultant stated policy, which would require that the physician undertaking to treat obesity as a specialty must possess broad scientific training and experience to a degree possessed by few, if any physicians. What was the House, or the reference committee or perhaps the judicial council afraid of?

In the JAMA of September 11, 1967, there was published a letter to the Editor, written by Dr. R. C. Henry of Portland, Oregon. Dr. Henry is Chief Medical Investigator of the State Board of Health. It was published under the headline Weight Reduction Pills. Dr. Henry wrote in part:

> The hazards inherent in the use of certain popular multicolored weight reduction pills which are being distributed in this area should be brought to the attention of the medical profession.
>
> At least six deaths, apparently related to these pills, have been studied in this office in the past two years.

The doctor then reports in detail two non-fatal cases:

(1) A woman, 38 years of age, was sent to hospital with a tentative diagnosis of acute, ascending Landry's type paralysis. She had been taking the rainbow colored pills for relief of obesity. Blood chemistry studies revealed profound hypokalemia. Administration of potassium produced dramatic recovery.

(2) A 35 year old woman who had been taking a series of colored weight reduction pills for two months complained of nervousness, dyspnea, and palpitation. Her heart rate was found to be 120 beats per minute. The ECG showed numerous ventricular premature beats with runs of ventricular tachycardia and digitalis effect.

Profiting by the experience of the first case, medication was discontinued, and all symptoms disappeared.

The letter continued:

> These colored pills are known to contain, either singly or in combination, the following drugs: digitalis, thyroid, a thiazene diuretic, a laxative, barbiturates, and amphetamine. The thiazene and laxative can promote potassium loss. The amphetamine anoxia can reduce potassium intake, and the resulting hypokalemia can sensitize the myocardium to digitalis and produce premature beats, ventricular tachycardia and fibrillation and death. . . .
>
> In the deaths investigated by this office, autopsy and toxicological findings have been completely normal. . . .
>
> Reliable postmortem blood samples for study would be almost unobtainable due to very early . . . hemolysis . . . with consequent release of potassium.

In a personal letter to the writer, Dr. Henry made the following comments:

> The companies manufacturing and distributing these pills hold "seminars" for the education of prospective doctor "customers". At these seminars they are instructed in the theory and practice of weight reduction operation.
>
> As I understand it, these pills are provided by various manufactures either prepackaged . . . or in a bulk container. . . .
>
> The physicians involved, who in the state are principally osteopaths, are under some scrutiny by the State Board of Medical Examiners.
>
> The attitude of the medical profession in this area is rather one of disapproval of this kind of management of obesity and a great deal of relief that the matter has been brought out in the open and aired for the benefit of the public.

The writer has been able to learn that there are now operating in South Carolina five of these clinics. If Senator Hart's statement is correct, namely, that interested physicians are being invited by the

manufactures of the rainbow pills to attend instructional seminars and are being promised annual incomes of from $100,000 to $300,000 from the operation of obesity or weight reducing clinics there is little doubt that there will soon be other clinics in operation.

So far as the writer knows there has been no overt advertising by the clinics in operation in South Carolina. The method of drawing patients is more subtle. It is the relation of the doctor's personal experience, the word of mouth testimonials of the patients to their friends, and the stimulation of an enthusiastic expectation of unwarranted results. One clinic not long in operation is reported to have already registered more than 500 patients.

So far as he has learned, there have been no suspicious deaths, and no recognized serious complications.

The method involves the use of powerful drugs in dangerous amounts. It involves the use of habit-forming drugs. It is contrary to all previously held concepts regarding the rational treatment of obesity. Its seeming success depends upon increasing catabolism by drug action and by increased bowel elimination, along with a drug-induced anoxia. It makes no attempt to develop changes in dietary habits and it does not encourage increased exercise.

It is hardly to be expected that the weight reduction achieved will be maintained after the treatment is discontinued. Hence, it will have to be either continued indefinitely or frequently repeated to sustain the promises made or implied.

The regimen seems to be a wholly commercial one, operated as such by the manufacturer and by the participating physicians, physicians who lack adequate training, and the necessary abilities to recognize or to treat complications which may arise or to skillfully and carefully select patients who may undergo the therapeutic regimen with relative safety.

Therefore, it seems reasonable to assume that the weight reduction clinics are potentially hazardous to the public health and that the public should be warned of the dangers of the treatment they employ.

The Effect of Adrenergic Blocking Agents on Plasma Insulin and Blood Glucose During Urethan or Epinephrine Induced Hyperglycemia—Prakash C. Kansal and Maria G. Buse (Charleston) (Metabolism 16:548-556, June, 1967)

Blood glucose and immunoreactive plasma insulin levels were measured in rats during hyperglycemia induced by urethan or epinephrine. The effect of adrenergic blocking agents was studied. Urethan induced hyperglycemia was prevented by acute bilateral adrenalectomy. The hyperglycemic effect of urethan was blocked significantly by phentolamine, N-isopropyl-methoxamine and Dichloro-isoproterenol, and that of epinephrine by phentolamine and N-isopropyl-methoxamine. There was no rise in plasma insulin levels in response to urethan or epinephrine induced hyperglycemia. The inhibition of insulin release in response to hyperglycemia was significantly reversed both in urethan and epinephrine treated rats, by phentolamine only (an alpha-adrenergic blocking agent). It is suggested that urethan induced hyperglycemia is induced by epinephrine. Endogenous epinephrine, as well as exogenous epinephrine, inhibits the insulin secretory response to hyperglycemia by stimulation of alpha-receptors. The inhibition of insulin release in response to hyperglycemia is not the major cause of the hyperglycemia induced by urethan or epinephrine since some adrenergic blocking agents can inhibit the hyperglycemia without increasing plasma insulin levels.

GRADUATE EDUCATION — 1967

RICHARD SPROTT POLLITZER, M.D.
Spartanburg, S. C.

Graduate Education is becoming an increasingly important function of the community hospital.

For the past three years, the Spartanburg General Hospital has operated a pilot project in Graduate Education in cooperation with the South Carolina Heart Association.

Visiting professors from several medical centers have been brought to the hospital to make rounds with the house staff and to lecture to the visiting staff.

In previous articles we have described the initiation of the project and reported the names of the visiting professors, together with their topics and the names of the pharmaceutical firms who have sponsored their visits.[1,2]

During the past twelve months the following professors have lectured to the hospital staff, either at the hospital or at the County Medical Society:

Dr. Calhoun Witham, Professor and Chairman, Department of Medicine, University of Georgia Medical College, lectured on "Cardiomyopathies"; his visit was sponsored by Squibb Laboratories.

Dr. Frank Fetter, Dean, Medical College of South Carolina, talked on "Graduate Education"; his visit was sponsored by Endo Laboratories.

Mr. Ray Brown, Professor and Director of Graduate Program on Hospital Administration, Duke University, Durham, North Carolina, lectured on the "Hospital of the Future"; his visit was sponsored by Roche Laboratories.

Dr. Peter Gazes, Associate Professor of Medicine, Medical College of South Carolina, lectured on "Coronary Care"; his visit was sponsored by Upjohn Laboratories.

Dr. J. D. Martin, Professor of Surgery, Emory University School of Medicine, Atlanta, Georgia, lectured on "Carcinoma of the Colon"; his visit was sponsored by Schering Laboratories.

In addition, the following professors from the Medical College of South Carolina made rounds with the house staff: Drs. Thomas Fitts, Fletcher Derrick, William Rambo, Dallas Dalton, William Lee, Curtis Artz, Gilbert Bradham, Peter Hairston, and Max Rittenbury; their visits were sponsored jointly by Lakeside Laboratories, Eli Lilly and Company, Geigy Pharmaceuticals, Ciba Pharmaceuticals, and the E. R. Squibb and Sons.

The hospital has just secured a Director of Medical Education, and it is felt that the program will go forward in the future to even greater success.

Dr. Pollitzer is in charge of the Electrocardiography Section of the Spartanburg General Hospital and is a member of the Heart Clinic of the Spartanburg General Hospital.

REFERENCES

1. Pollitzer, Richard S., Graduate education and the community hospital, J S Carolina Med Ass 61: 212. (July, 1965.)
2. Pollitzer, Richard S., Graduate education, Part II, J S Carolina Med Ass, 62:292. (July 1966.)

DEATHS

Dr. Matthew S. Moore

Dr. Matthew S. Moore, retired Charleston physician, died December 27.

He was born May 26, 1886, and graduated from the Medical College of South Carolina in 1908. Dr. Moore studied neurology in Philadelphia and then returned to Charleston where he was engaged in the general practice of medicine until his retirement several years ago. He had taught at the Medical College of South Carolina.

Dr. Moore was a member of the Charleston County Medical Society, the Medical Society of South Carolina, the South Carolina Medical Association and the American Medical Association. For many years he was active in the Medico-Chirurgical Club.

Dr. Robert B. McNulty Jr.

Dr. Robert B. McNulty Jr. of Columbia, head physician at the University of South Carolina died December 28. He was 57.

Dr. McNulty was also physician for USC athletic teams for a number of years.

He was born in Columbia June 25, 1910, and attended the University of North Carolina and graduated from the University of South Carolina in 1931. He was a member of Chi Phi fraternity.

He graduated from the Medical College of South Carolina in Alpha Kappa fraternity.

After interning at Garfield Memorial Hospital in Washington, D. C., he began practicing in Columbia in 1936.

He was a member of the South Carolina Medical Association, the Columbia Medical Society the American Medical Association and the Medical Club.

He was formerly chief of staff at the Providence Hospital and a former secretary of the Columbia Medical Society. He was a founding member of Eastminster Presbyterian Church.

BOOKLET AVAILABLE

"Guides to the Evaluation of Permanent Impairment" developed by the Committee on Rating of Mental and Physician Impairment of the AMA is available.

A limited number of copies of copies of this guide may be obtained without charge upon written request to the Committee on Rating of Mental and Physical Impairment, 535 North Dearborn Street, Chicago, Ill. 60610.

MEETINGS

The Atlanta Graduate Medical Assembly has announced its 25th Annual Session, scheduled for April 15, 16, 17, 1968. The session is sponsored by the Fulton County Medical Society and will be held at the Marriott Motor Hotel in Atlanta.

For more information write: Atlanta Graduate Medical Assembly, 875 West Peachtree St., N. E., Atlanta, Ga. 30309.

The 2nd National Congress on the Socio-Economics of Health Care will be held March 22-23, 1968 at the Palmer House, Chicago.



PROOF POSITIVE

Diet-Rite Cola...America's Number One low-calorie cola... no sugar at all...less than one calorie per bottle...the one with the wonderful taste of cola...pH approximately 2.6 to 2.8...same general range acidity as other cola beverages plus number of fruit juices.

You will like Diet-Rite Cola. So will your patients.

Royal Crown® Cola Co. Columbus, Georgia

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Book Reviews



SYNOPSIS OF GYNECOLOGY. D. W. Beacham & W. D. Beacham. 384 pages with illustration. $8.50. The C. V. Mosby Company, St. Louis, 1967.

This small popular work continues to fulfill admirably the original authors' intention to supply general principles and salient features of the speciality to those expecting to follow other branches of medicine. The subject matter is well organized, presented in a clear balanced manner. The chapter on vulval lesions is well done in contrast to some of the current tomes. This reflects the continuing New Orleans interest in such lesions. The chapters on contraception and medico-legal aspects of gynecology are welcomed additions to such a volume. The binding, paper, printing, and illustrations are quite good. Objections are minor and do not detract from the overall usefulness of the book. One might mention such things as the authors' statement that estrogens are of little aid in most patients with ovarian dysplasia. This reviewer has found them mandatory for coital activity in some of those patients who have married. The volume is recommended for medical students but not for those physicians with a more special interest in gynecology.

H. Oliver Williamson, M.D.

THE OFFICE ASSISTANT in Medical Practice. By Portia M. Frederick and Mary E. Kinn, C.P.S. Third Edition; illustrated. W. B. Saunders Company, Philadelphia. 1967. pp. 467 $7.50.

These co-authors have presented in this book 461 pages of authoritative information and illustrations relating to the duties, ethics and techniques in the training of the office assistant in medical practice. There are chapters covering bookkeeping and diverse secretarial duties, including illustrated suggestions for billing, office corespondence and records, with an alphabetical list of medical abbreviations and symbols. Office behavior and medical and legal ethics are discussed in detail. Techniques for assisting in physical and laboratory examinations, as well as in minor office surgery, are fully explained and illustrated.

This is a valuable textbook for any teaching and training program for medical office personnel and provides a useful reference book for the experienced office assistant.

Virginia Reynolds, Medical Assistant

INSURANCE FOR THE DOCTOR by Harvey Sarner and Herbert C. Lassiter. W. B. Saunders Co., Philadelphia. 1967 pp. 193. $9.00.

Most doctors are quite conscious of insurance needs. Most of us even realize the need for constant revision. What was adequate fifteen or thirty years ago is no longer even realistic in today's world. We need help! Here it is. On one hundred and ninety three pages, all the various forms of insurance coverage necessary for the doctor are reviewed comprehensively but simply (no incomprehensible statistical tables. etc.) with suggestions in each chapter as to what the doctor needs at different ages. The new office overhead insurance chapter is particularly interesting. The overlapping of disability insurance and office overhead insurance is discussed clearly.

The tax aspects of various premiums and various insurance payments are tabulated. A chapter on insurance planning is particularly good, containing a form for the reader to fill out. Insurance forms and claims are also discussed and the book is altogether a real "must" for most of the doctors practicing today.

John van de Erve, M.D.

ROENTGENOLOGIC DIAGNOSIS by J. George Teplick, M.D., Marvin E. Haskin, M.D., F.A.C.P., and Arnd P. Schimert, M.D., 2 volumes, cloth, W. B. Saunders Co., Philadelphia and London, 1967. Pp. 1198 with 2000 illustrations. Price $38.00.

The text was written with the intention of providing practicing physicians, medical and radiology residents with the appearance, incidence and specificity of the radiographic findings of almost every disease, whether common or rare. The clinical, physiological and pathological aspects of the disease have been largely omitted. The result is essentially an atlas of radiographic findings but the text, although brief, is crowded with information. The various causes of specific roentgenologic findings are not listed in differential diagnosis form as would be the case in a textbook of radiology and one would therefore not consult this text for the differential diagnosis of a miliary pulmonary infiltrate. Sarcoidosis, for example, is given a one page text in which the following is touched upon: the 20% frequency that parenchymal lesions are found without adenopathy, the patterns of pulmonary involvement, the 10% likelihood of irreversible pulmonary fibrosis and the significance of this occurrence, and the incidence, type and sites of bone involvement. Salivary gland findings and the technique necessary to prove this involvement are included. Following are twelve illustrations of the findings mentioned. A section is given to the technique and purpose of special radiographic procedures.

In general, the material is up to date and the illustrations are excellent. The book will be a liaison between the clinician and radiologist in that the

clinician will be better able to weigh the reports of the radiologist and the latter will receive more sophisticated and specific requisitions. The result will be better medical practice by both parties. Therefore these volumes are highly recommended.

Frank Gruber, M.D.

A HISTORY OF MEDICINE IN SOUTH CAROLINA 1825-1900. Joseph Ioor Waring, M.D. Published by The South Carolina Medical Association, 1967 Columbia, R. L. Bryan Co. 1967. $7.50.

This is really a second volume of the book, **A History of Medicine in South Carolina, 1670-1825,** written by Dr. Waring and published by the Association in 1964.

The book is divided into three parts, with a Foreword by the author and a Preface by Dr. Richard H. Shyrock, of the American Philosophical Society.

The first part is a narrative account of the historical events, medical conditions, and the accomplishments of medicine and developments in medical education during the period treated. Its most interesting chapters describe medical conditions within the State in 1895; a vivid description of plantation medicine; and a discussion of medical education of the times. Its least interesting chapter deals, in perhaps too great detail, with the scourge of epidemic diseases in that day before their etiology was understood and rational treatments devised. This chapter, although necessary in delineating the medical history of the period and although very revealing of the health hazards and the difficulties experienced in combating them, becomes monotonous and boring. It does reveal graphically the heroism of many of the doctors of that day.

The chapters on the early medical colleges, both chartered and private preparatory schools, and of the state of medical education generally are an interesting relief from the dreary story, with statistical analysis of the succession of epidemics of that period.

Part II is devoted to the role of South Carolina physicians and of its hospitals in caring for the soldiers of the Confederacy.

Part II is the longest section of the book, and to many readers, it will, perhaps, be the most interesting. It describes the days of the Reconstruction and the role of the physician in that trying time. It tells of the revival of the South Carolina Medical Association, the establishment of district, or county, medical societies, the growth of hospitals, the establishment of the State Board of Health, and closes with more or less brief biographies of more than 100 of our predecessors, and the ancestors of many of our group, who still bear the family name, and who continue to be prominent in South Carolina medicine.

There are 32 interesting illustrations, including a portrait of Eli Geddings, M.D., the first graduate of the Medical College of South Carolina, who later was active in medical education, who possessed one of the finest medical libraries in the country, and who was a prolific writer on medical topics.

There are several tables, which are of interest to the general reader and of value to the historian. These include an authenic list of South Carolina physicians in the service of the Confederacy, and those who served in the other wars fought by the United States, a list of the graduates of the Medical College of South Carolina, 1824-1833, and lists of presidents and secretaries of the South Carolina Medical Association from its founding in 1848-1900.

The book is written in an easy and interesting style and is a pleasing example of fine printing and book binding.

J. Decherd Guess, M.D.

TREATMENT OF MENTAL RETARDATION: PART I and PART II. Charles M. Poser, M.D., Guest Editor. Modern Treatment, Vol. IV Number IV (July, 1967) and Vol. IV Number V (September, 1967). Hoeber Medical Division, Harper & Row, Publishers, New York. Bimonthly Publication. $16.00 per year.

This two-part article on the various aspects of treatment in mental retardation should be of interest to both the generalist and the specialist. The several sections that make up Part I are highly flavored from the neurological standpoint and also contain a very forthright discussion on the use and limitations of psychological evaluation. The section dealing with communicative disorders presents a fundamental comparison of the major stages of normal speech development with speech problems commonly seen in the mentally retarded. Part I is concluded with a good basic review of genetic investigation and counseling.

Part II is given over entirely to an orderly and easily readable discussion of the prime characteristics and treatment of metabolic and endocrine causes of mental subnormality. This section contains several excellent tables which the reader should find most helpful as reference regarding the clinical features and differential diagnosis in this highly complex group of medicine and endocrine disorders.

J. W. Blanton, Jr., M.D.

PATIENTS, DOCTORS AND FAMILIES. Faye C. Lewis, M.D. Doubleday & Co., New York, pp. 240. $4.95.

This is basically a recounting of the many and varied experiences in the life of a general practitioner—in this case, a woman. In a sympathetic and understanding way, it touches on a wide variety of real and imagined troubles, which give the author an opportunity for philosophical comment. It is smooth and interesting reading, suited rather to the public than to the profession.

J. I. W.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

PONSTEL

Analgesic, Non-narcotic. Rx

Manufacturer: Parke, Davis & Co.

Nonproprietary Name: Mefenamic acid

Indications: Short-term use in relief of pain in conditions ordinarily not requiring the use of narcotics.

Contraindications: Intestinal ulceration, women of childbearing age, children under 14 yrs.

Dosage: 500 mg initially, then 250 mg q6h, prn, for no longer than one week.

Supplied: Kapseals—250 mg, bottles of 100.

TALWIN

Analgesic, Non-narcotic. Rx

Manufacturer: Winthrop Laboratories

Nonproprietary Name: Pentazocine lactate

Indications: Relief of pain associated with: minor or major surgery, trauma, orthopedic conditions, dental procedures, active labor, urologic conditions or procedures, acute and chronic medical disorders. As preoperative or preanesthetic medication, as a supplement to surgical anesthesia.

Contraindications: Increased intracranial pressure, head injury, or pathologic brain conditions in which clouding of sensorium is undesirable. Not for children under 12 yrs.

Dosage: Pts. in labor: 30 mg i.m., or 20 mg i.v. two or three times. All others: 30 mg i.m., s.c., or i.v., repeated every 3-4 hrs.

Supplied: Ampuls—1 ml—30 mg base, boxes of 10, 25, and 100 Disposable syringes—1 ml—30 mg base, boxes of 10 Vials—10 ml—30 mg base/ml, boxes of 1.

VIBRAMYCIN Hyclate

Antibiotic—B & M spectrum. Rx

Manufacturer: Pfizer Laboratories

Nonproprietary Name: Doxycycline Hyclate

Indications: Pneumonia; respiratory, genitourinary, soft tissue, ophthalmic, and gastrointestinal infections. Other infections caused by susceptible strains of gram-positive and gram-negative bacteria.

Contraindications: Hypersensitivity to doxycycline.

Dosage:

Adults—initial: 200 mg (100 mg q.12h.)
maint.: 100 mg (as single dose or 50 mg q.12h.)

Children under 100 lbs.—2 mg/lb. divided into 2 doses, followed by 1 mg/lb. as a single dose, or divided into 2 doses.

Supplied: Capsules—50 mg base, bottles of 50.

VIBRAMYCIN Monohydrate

Antibiotic—B & M spectrum. Rx

Manufacturer: Pfizer Laboratories

Nonproprietary Name: Doxycycline Monohydrate

Indications: Pneumonia; respiratory, genitourinary, soft tissue, ophthalmic, and gastrointestinal infections. Other infections caused by susceptible strains of gram-positive and gram-negative bacteria.

Contraindications: Hypersensitivity to doxycycline.

Dosage:

Adults—initial: 200 mg (100 mg q.12h.)
maint.: 100 mg (as single dose or 50 mg q.12h.)

Children under 100 lbs.—2 mg/lb. divided into 2 doses, followed by 1 mg/lb. as a single dose, or divided into 2 doses.

Supplied: Dry powder for oral suspension—25 mg base/5 ml, raspberry-flavored, bottles of 2 oz.

DUPLICATE SINGLE PRODUCTS

SOMBUCAPS

Sedative & Hypnotic—Barbiturate. Rx

Manufacturer: Riker Laboratories

Nonproprietary Name: Hexobarbital

Indications: Insomnia, interrupted sleep, preanesthesia, post-operative sedation, short-term sedation for diagnostic and minor surgical procedures.

Contraindications: Latent or manifest porphyria or a familial history of intermittent porphyria. Impaired hepatic or renal function.

Dosage: 1 to 2 caps. every 2-3 hrs., as necessary.

Supplied: Capsules—250 mg, bottles of 50

COMBINATION PRODUCTS

ALLBEE-T

Manufacturer: A. H. Robins Co.

Composition:		
	Thiamine mononitrate	15 mg.
	Riboflavin	10 mg.
	Pyridoxine HCl	10 mg.
	Calcium pantothenate	25 mg.
	Niacinamide	100 mg.
	Ascorbic acid	500 mg.
	Cyanocobalamin	5 mcg.
	Desiccated liver	150 mg.

Indications: Vitamin deficiency states, except pernicious anemia.

Contraindications: None mentioned.

Dosage: One or two tablets daily.

Supplied: Tablets—bottles of 100 and 500.

DRIXORAL

Nasal decongestant. Rx

Manufacturer: Schering Corp.

Composition:		
	Dexbrompheniramine maleate	6 mg.
	d-Isoephedrine sulfate	120 mg.

Indications: Upper respiratory mucosal congestion

in seasonal and perennial nasal allergies, acute rhinitis and rhinosinusitis, acute and subacute sinusitis, eustachian tube blockage, and secretory otitis media.

Contraindications: Children under 12 yrs. of age, pregnancy.

Dosage: One tablet in the morning and one at bedtime. Exceptional cases may require one tablet q.8h.

Supplied: Tablets, sustained-release. Bottles of 50.

NORLESTRIN—1 mg.

Progesterone/Estrogen Comb. Rx

Manufacturer: Parke, Davis & Co.

Composition: Norethindrone acetate 1 mg.
Ethinyl estradiol 0.05 mg.

Indications: Control of conception

Contraindications: Thrombophlebitis or history of thrombophlebitis or pulmonary embolism, liver dysfunction or disease, known or suspected carcinoma of the breast or genital organs, undiagnosed vaginal bleeding.

Dosage: 1 tablet daily, for 20 days beginning on the 5th day of each cycle.

Supplied: Tablets—bottles of 100, packages containing 5 folders of 20 tablets each.

NEW DOSAGE FORMS

CARDILATE

Vasodilators-Coronary. Rx

Manufacturer: Burroughs Wellcome & Co.

Nonproprietary Name: Erythrityl tetranitrate

Indications: Phophylaxis and long-term management of patients with frequent or recurrent anginal pain and reduced excercise tolerance.

Contraindications: None mentioned.

Dosage: 1 tab. tid, additional doses may be taken prior to anticipated stress, and at bedtime if necessary.

Supplied: Chewable tablets—10 mg, bottles of 100.

ROBINUL Injectable

Antispasmodic. Rx

Manufacturer: A. H. Robins Co.

Nonproprietary Name: Glycopyrrolate

Indications: Gastrointestinal disorders that will benefit from parenteral anticholinergic therapy, in cases when oral medication is not tolerated, or a rapid effect is desired.

Contraindications: Glaucoma, organic cardiospasm, achalasia of the esophagus, pyloric obstruction or stenosis with significant acid retention, obstructive or stenosing disease of the gastrointestinal tract, urinary bladder neck obstruction and prostatic hypertrophy.

Dosage: 0.1 mg i.m., at four hour intervals, 3 or 4 times daily.

Supplied: Ampuls—1 ml (0.2 mg.)
Multiple dose vials—5 ml (0.2 mg/ml.)

TARACTAN CONCENTRATE

Ataraxic. Rx

Manufacturer: Roche Laboratories

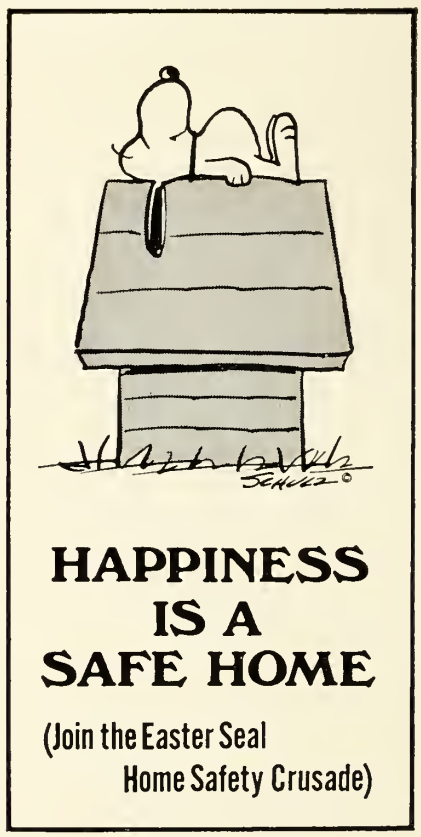
Nonproprietary Name: Chlorprothixene

Indications: Psychiatric disorders requiring a higher dosage.

Contraindications: Circulatory collapse, comatose states due to central depressant drugs, known sensitivity to the drug.

Dosage: Must be individually adjusted. Severe conditions usually require 25 to 50 mg three or four times daily (up to 600 mg.)

Supplied: Liquid—100 mg/5 ml, bottles of 16 oz.





...t's be specific about Campbell's Soups...
and *reducing diets*



There are more than 30 million people in America who are overweight. During the next year, you probably will see more than 1,000 of them in your own practice.

One good way to help these patients is to give them a reducing diet based on ordinary eating patterns.

Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



To obtain a supply for your office write to:
Campbell Soup Company, Box 265, Camden, N. J. 08101

new evidence for TAO® (triacetyl-oleandomycin)

a macrolide antibiotic for the frequently seen respiratory infection in the office and for a problem pathogen* in the hospital.

*Staphylococcus aureus

study I[1]

Results of a 1967 in vitro—in vivo correlation study involving 116 patients with Gram-positive coccal infections in five institutions. All patients were given TAO prior to determining the susceptibility of the offending organism.

97.0%
of the organisms were susceptible o oleandomycin*

98.0%
of the patients responded favorably to TAO® (triacetyloleandomycin)

*In some cases more than one pathogenic organism was isolated from the patient.

study II[2]

Effect of oral therapy with TAO, erythromycin, and cloxacillin on the survival time of Rhesus monkeys after intravenous inoculations of lethal doses of staphylococci, phage type 80/81.
(8 monkeys in each group)

conclusion:

*Under the conditions of this study and the doses employed, it was found that

TAO® (triacetyl-oleandomycin)
was far superior to erythromycin, as was cloxacillin, a bactericidal agent, and of particular interest, "...bacteriostatic triacetyloleandomycin was as effective or perhaps superior to cloxacillin in preventing lethal (staphylococcal, phage type 80/81) infection."

*It should be pointed out that results obtained in an experimental study of this nature may not necessarily be directly extrapolated to the clinical situation as it pertains to man.

TAO Rx Information
INDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents. **CONTRAINDICATIONS AND PRECAUTIONS:** Not recommended for prophylaxis or in the treatment of infectious processes which may require more than ten days continuous therapy. In view of the possible hepatoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgement dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including darkfield examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug. Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

References: 1. Isenberg, H. D.: Clinical Evaluation of Laboratory Guidance to Antibiotic Therapy; Health Laboratory Science (July) 1967. 2. Saslaw, S., Carlisle, H. N.: Studies on Therapy of Staphylococcal Infections in Monkeys. I. Comparison of Cloxacillin, Triacetyloleandomycin and Erythromycin. Proc. Soc. Exp. Biol. & Med.: Vol. 125, No. 4 (Aug.-Sept.) 1967.

J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
235 EAST 42nd STREET
NEW YORK, N.Y. 10017


HALT DIARRHEA!
SHERIFF

LOMOTIL®

TABLETS / LIQUID

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride .....2.5 mg.
(Warning: may be habit forming)
atropine sulfate .....0.025 mg.

lalts Diarrhea Promptly

in children with . . . Gastroenteritis ▪ Spastic bowel
Influenza-like infections ▪ Antibiotic-induced diarrhea

motil helps get children with diarrhea off toast and tea and back to normal its and normal activity with gratifying dispatch. ▪ Lomotil lowers intestinal tility and permits absorption of excess fluid. This usually controls diarrhea rmptly. ▪ Moreover, lowered intestinal motility achieved with Lomotil often eves the abdominal cramps and discomfort so distressing to children.

rcautions: Lomotil is a Federally exempt acotic preparation of very low addictive otntial. Recommended dosages should obe exceeded, and medication should be ep out of reach of children. Should accieral overdosage occur signs may include evere respiratory depression, flushing, etlargy or coma, hypotonic reflexes, nysagmus, pinpoint pupils, tachycardia; orinuous observation is recommended. otil should be used with caution in paiers with impaired liver function or those akng addicting drugs or barbiturates.

id Effects: Side effects are relatively unormon but among those reported are asrointestinal irritation, sedation, dizzies, cutaneous manifestations, restsness, insomnia, numbness of the xtmities, headache, blurring of vision, veing of the gums, euphoria, depression ndgeneral malaise.

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . .½ tsp.* t.i.d. (3 mg.)
6-12 mo. .½ tsp. q.i.d. (4 mg.)
1-2 yr. . . .½ tsp. 5 times daily (5 mg.)
2-5 yr. . . .1 tsp. t.i.d. (6 mg.)
5-8 yr. . . .1 tsp. q.i.d. (8 mg.)
8-12 yr. . .1 tsp. 5 times daily (10 mg.)
Adults: . .2 tsp. 5 times daily (20 mg.) or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

SEARLE *Research in the Service of Medicine*

When the agitated businessman goes to work...

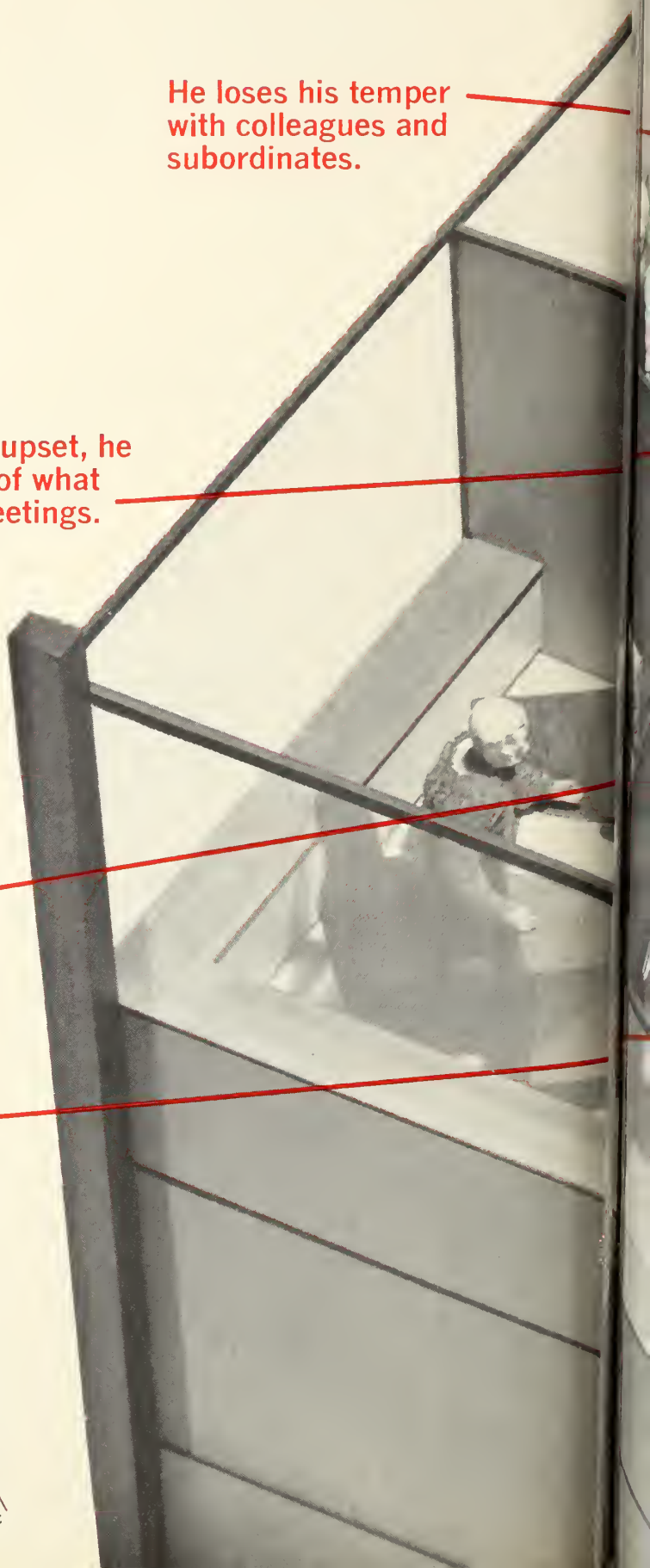
He goes home at night and takes it out on his family.

He loses his temper with colleagues and subordinates.

Emotionally upset, he misses half of what is said at meetings.

He is always fearful about his standing with the boss.

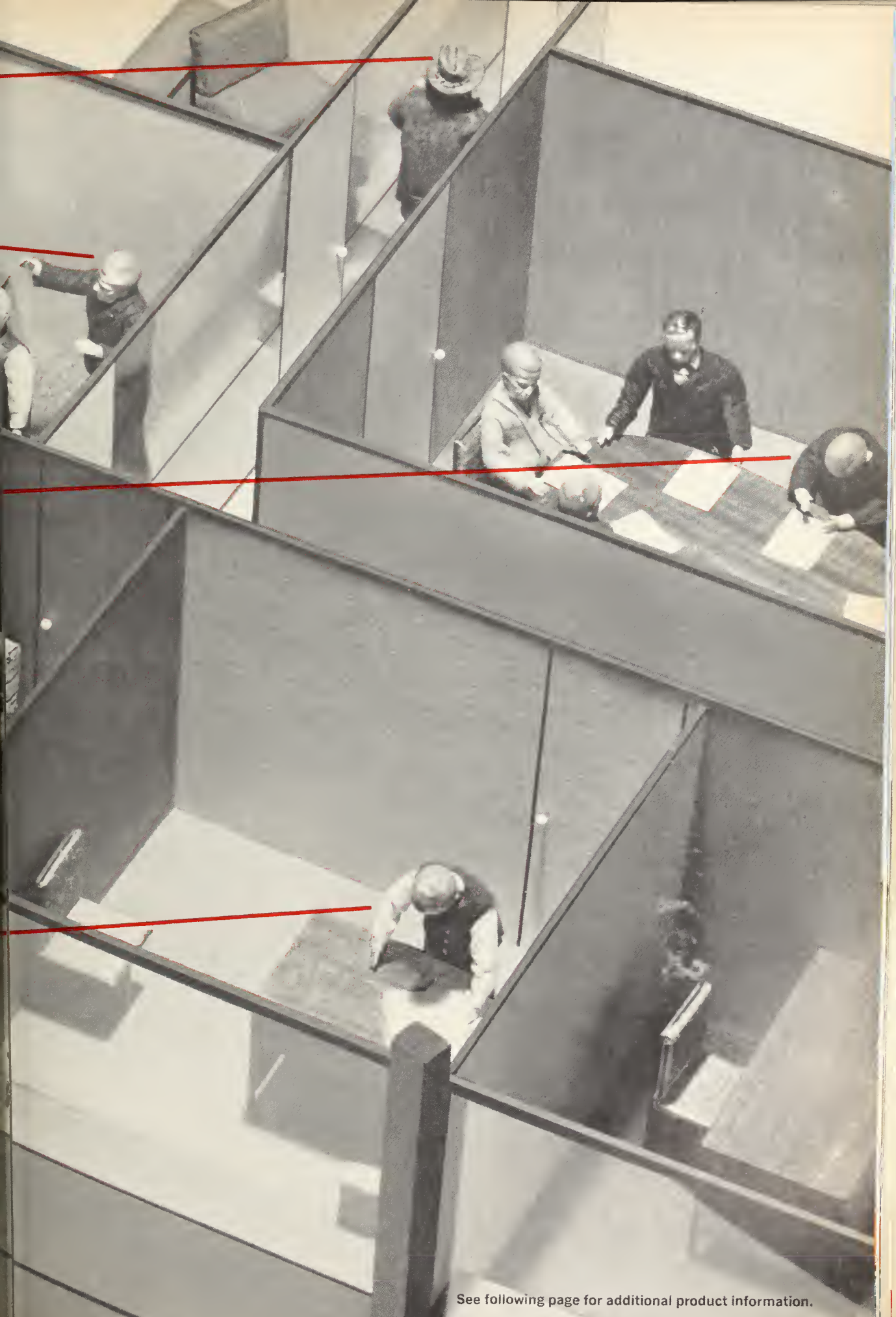
He just can't seem to settle down to his work.



for moderate to severe anxiety

Mellaril® (thioridazine) 25 mg. t.i.d.

SANDOZ



See following page for additional product information.

When the agitated businessman goes to work...

Anxiety that seriously interferes with the individual's performance at work, at home, or in the community may be regarded as *moderate* to severe in degree.

Mellaril often recommends itself to the treatment of moderate to severe anxiety because it

- helps control the most frequent symptoms: marked tension, agitation, apprehension, restlessness, hypermotility
- often alleviates anxiety-induced somatic complaints
- frequently helps strengthen emotional resources
- helps the patient maintain realistic contact with environment, closer harmony with family

Thus, when you consider the anxiety moderate to severe... consider Mellaril.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine; and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.

Before prescribing, see package insert for full product information.

for moderate to severe anxiety

Mellaril®
(thioridazine)
25 mg. t.i.d.

SANDOZ

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming...	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

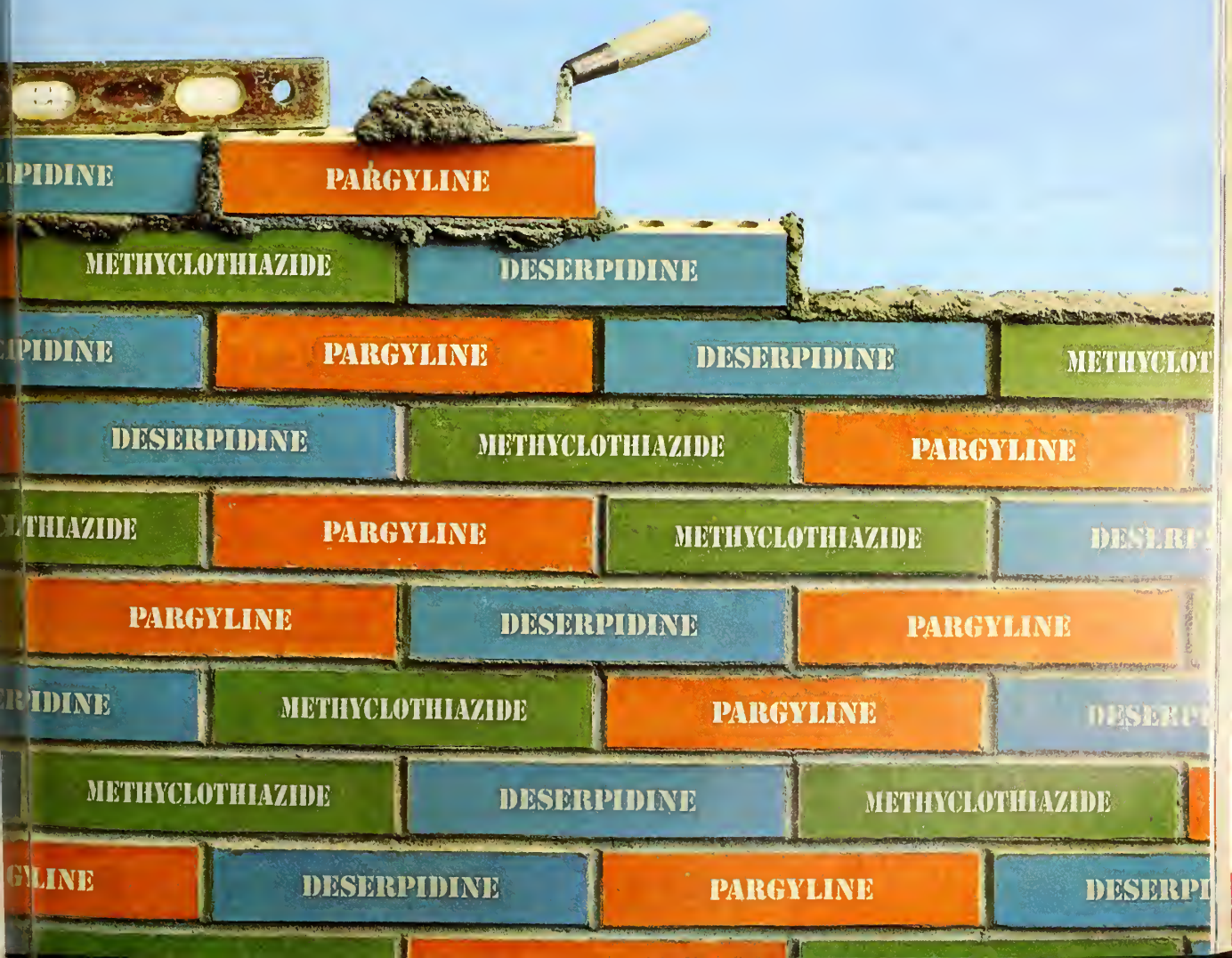
MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient sodium excretion is greatly enhanced. Yet potassium loss is lov

The therapeutic action is smooth, and persits for a full 24 hour With Enduron you can prescribe convenient once-a-day dosag without skimping your patients on day-long thiazide effectivenes

Of course, as with all thiazides, supplemental dietary potassiu should also be considered.

Use Enduron as a basic therapy in patients with mild to mc erate hypertension. A single 5-mg. tablet each day is ample most cases.

Once a day, every day

ENDURON

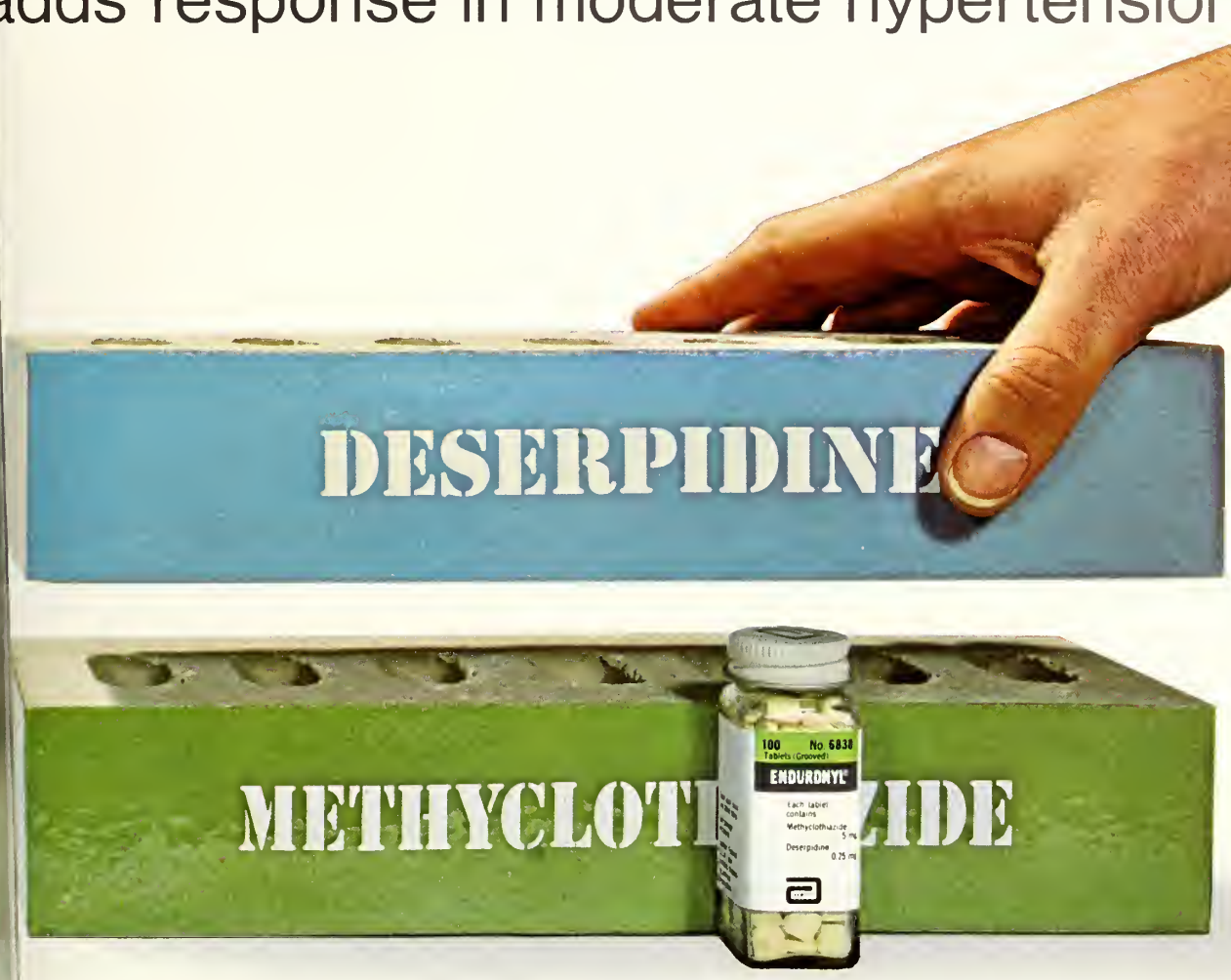
METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVE



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

Once a day, every day

ENDURONYL

METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

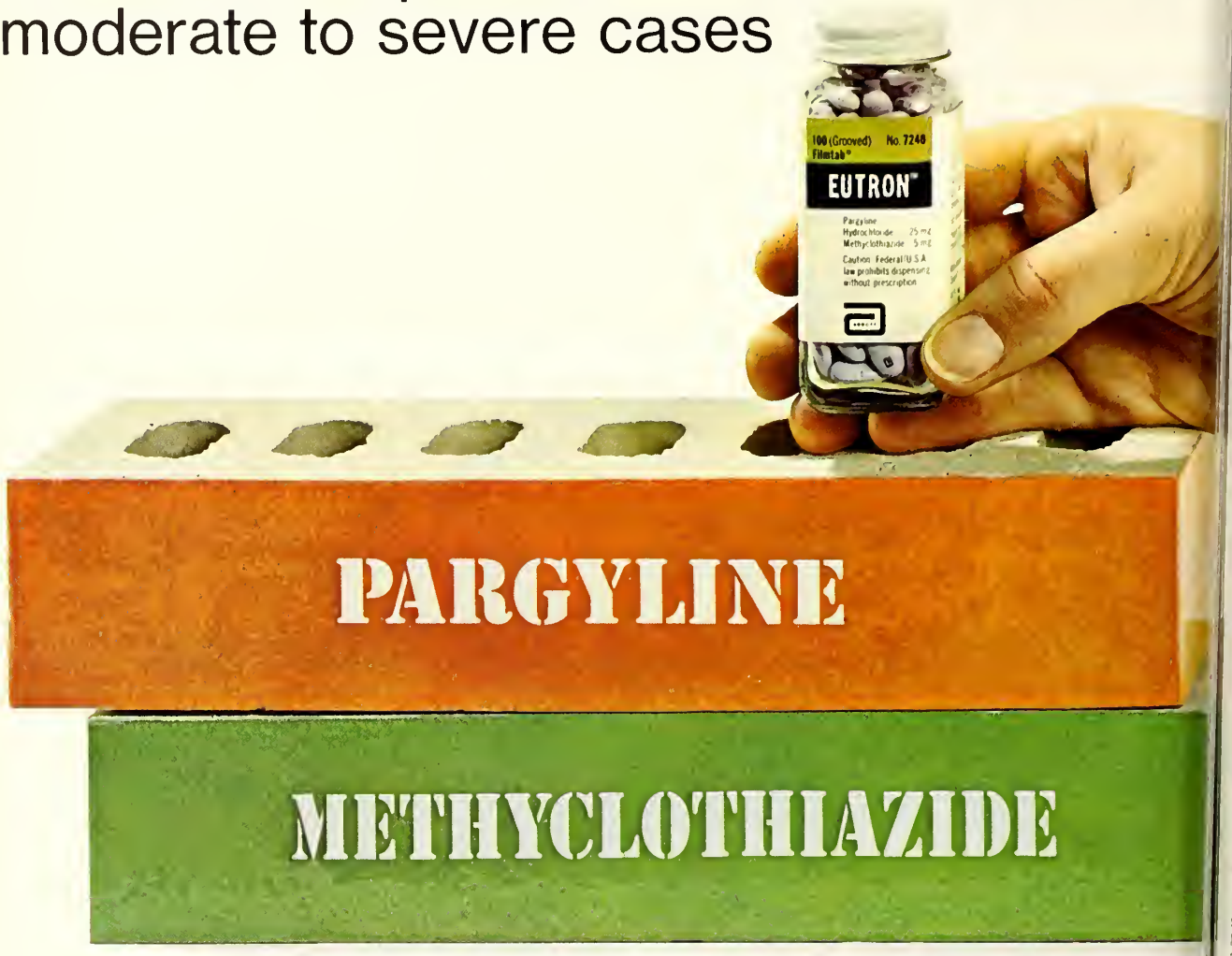
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether yo patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings we reduced from 112 pre-treatment to 90 post-treatment; *sitting* fro 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nea alike in all three body positions.

Use Eutron for managing your moderate to severe cases. building blocks enhance each other; hence lesser doses often suffi

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVE



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amendable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

TM-TRADEMARK

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅓ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

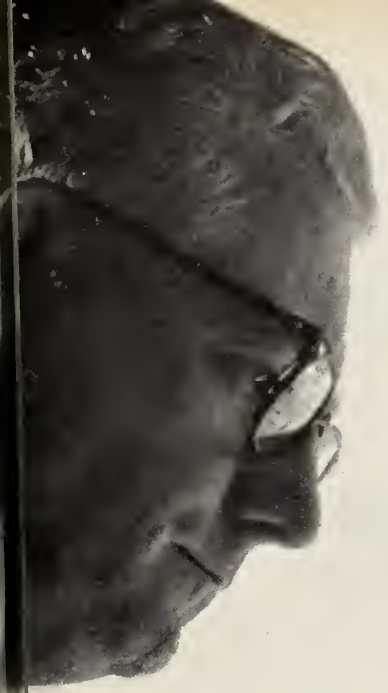
During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

801438

ABBOTT





Tissue's healing nicely. Yet anxiety slows his steps toward recovery.

By helping overcome anxiety and tension which can thwart the convalescent's progress, Equanil® often may play an important role in medical and surgical aftercare.

Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

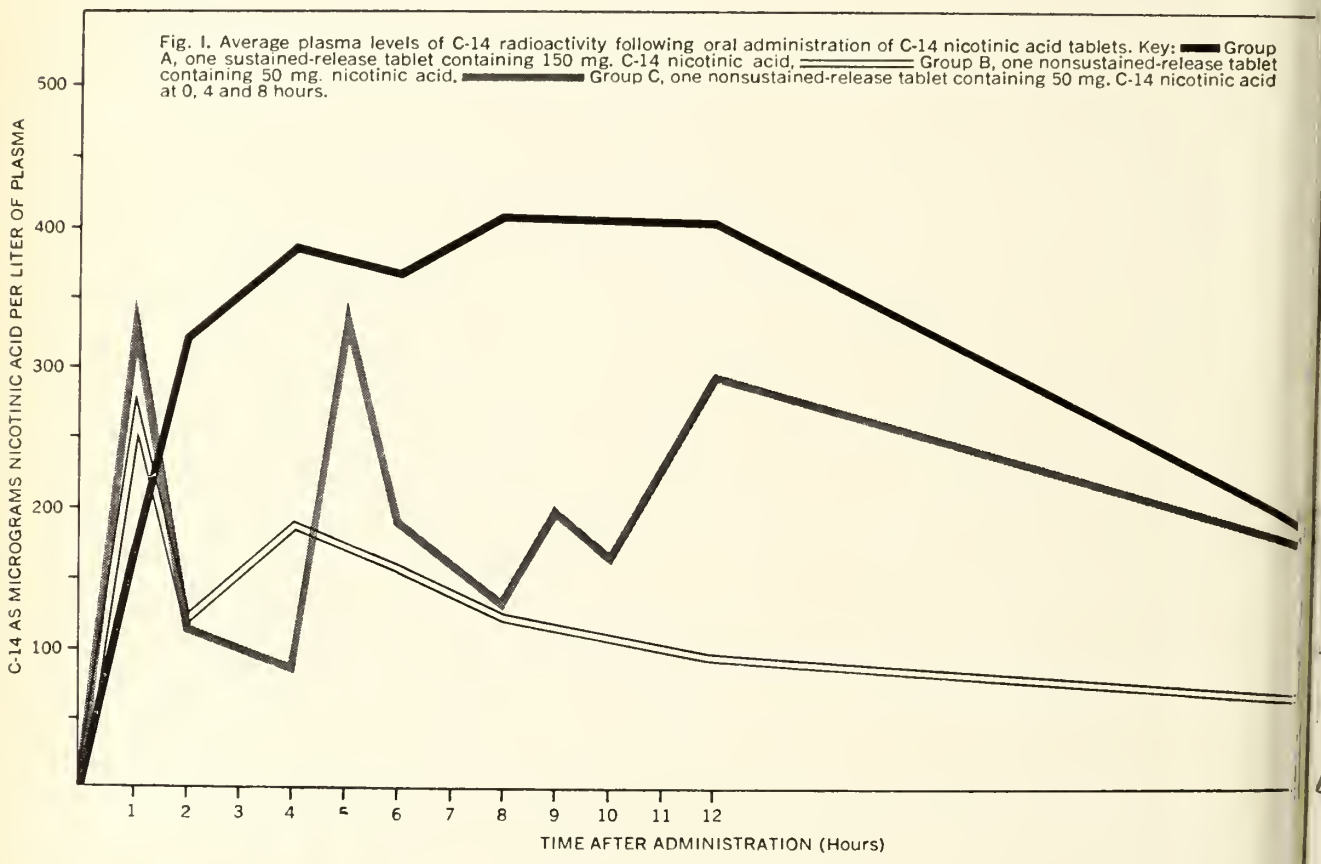
Wyeth® SERVICE TO MEDICINE

Equanil® (meprobamate) Wyeth

Professionally posed.

Sustained circulatory, respirato and cerebral stimulation for t

Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.





(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* b tinuous on a daily dose of only one Geroniazol T let every 12 hours.

The gradual release of nicotinic acid in Gero TT will provide the well-known peripheral vaso tion needed in patients with deficient circulati with a minimum amount (if any) of "flushing." cerebrovascular circulation is complemented b tylenetetrazol, long-established as a cerebral ar piratory stimulant.

Geroniazol TT improves the typical, unfort signs of senile confusion. Patients become mor

ed and debilitated

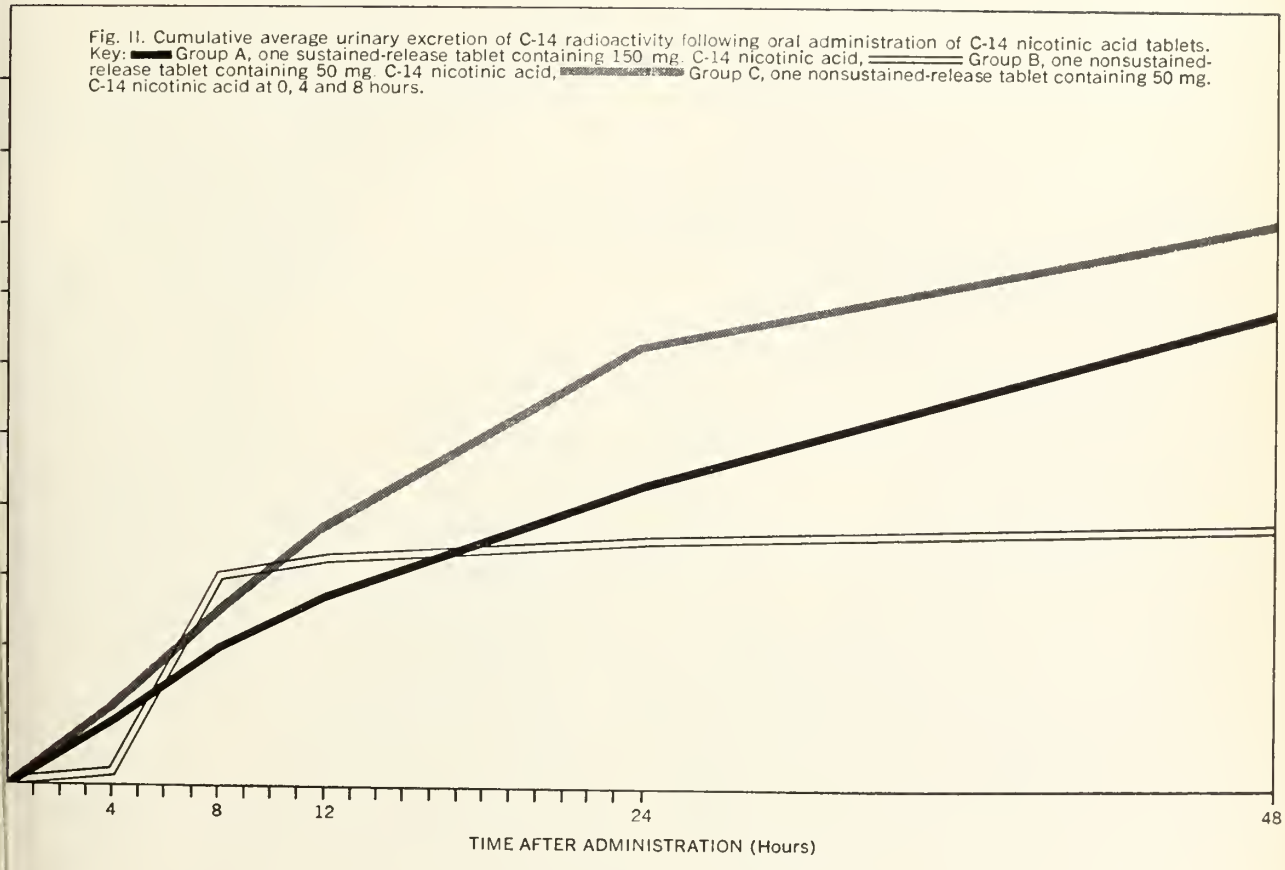


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

nfused and moody. Personal care, memory, onal stability, social attention improve. Fatigue, and irritability are reduced.

escription for 100 tablets of Geroniazol TT will your patients to enjoy the benefits of time-loged nicotinic acid/pentylenetetrazol therapy, conomical price. Dosage is only one tablet every hors.

indications: There are no known contraindica-

tions: Exercise caution when treating patients low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

First with the Retro-Steroids"

HILIPS ROXANE LABORATORIES

Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
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Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

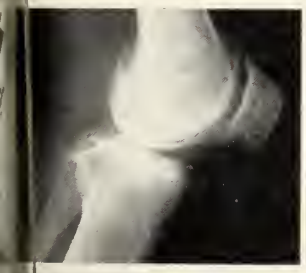


Tandearil®, oxyphenbutazone, 100 mg. tablets

Indications: Osteoarthritis, rheumatoid arthritis, rheumatoid spondylitis, psoriatic arthritis, gout, painful shoulder (peritendinitis, capsulitis, bursitis and acute arthritis of that joint), acute superficial thrombophlebitis, severe forms of a variety of local inflammatory conditions. (In inflammatory conditions not involving prolonged or fatal disease, use only when severity of condition balances potential toxicity.)
The drug has no significant uricosuric action but is of value only in the treatment of acute gouty arthritis.
Contraindications: Edema, danger of cardiac decompensation, history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.
Warning: Tandearil is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.
Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.
Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of ankles or face may be minimized by with

"Pain Break" for an osteoarthritic. Tandearil can ease it.

At 46, her knees still look good on the outside. But inside, there may be the familiar picture of osteoarthritis.



If aspirin doesn't help, Tandearil often will. Pain and stiffness begin to ease up in 3 or 4 days. You can often maintain response with a daily dose of only 1 or 2 tablets.

Of course, Tandearil is not for every osteoarthritic. Select your patients carefully and follow them in line with the Contraindications, Precautions, Warning, and Adverse Reactions listed below.

But for many aspirin-stubborn osteoarthritics, let Tandearil relieve the unwelcome pain breaks of osteoarthritis.

Tandearil®
oxyphenbutazone

...dir... dietary salt, reduction in dosage or use diuretics. In elderly patients and in those ...th hypertension the drug should be discon...ued with the appearance of edema. The ...g has been associated with peptic ulcer ...d may reactivate a latent peptic ulcer. The ...ient should be instructed to take doses im...diately after meals or with milk to minimize ...stric upset. Mild drug rashes frequently ...sis with reduction of dosage. However, ...h accompanied by fever or other systemic ...ctions usually requires withholding medica...n. Purpuric rash has also been reported. ...anocytosis or a generalized allergic reac... similar to a serum sickness syndrome may ...ur and require permanent withdrawal of ...dication. Stomatitis, salivary gland enlarge...t, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. It is usually unnecessary to exceed 4 tablets daily. A trial period of 1 week is adequate to determine response, in the absence of a favorable response, discontinue. Maintenance: An effective level is often achieved with 1 or 2 tablets daily, do not exceed 4 daily. 6562-VI(B)R2

For complete details, please see full prescribing information.

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Persistin is also valuable for *day-long control* of the pain and discomfort of arthritis.

DOSAGE: *To relieve morning stiffness and pain*-when salicylates have not been taken during the day, an adult dose of three tablets at bedtime is suggested.

For 24-hour control of pain: Adults up to 160 lbs.-one tablet after each meal and one at bedtime. Adults over 160 lbs.-one tablet after each meal and two at bedtime.

PRECAUTION: Other salicylates should not be taken concurrently. Do not exceed recommended doses.

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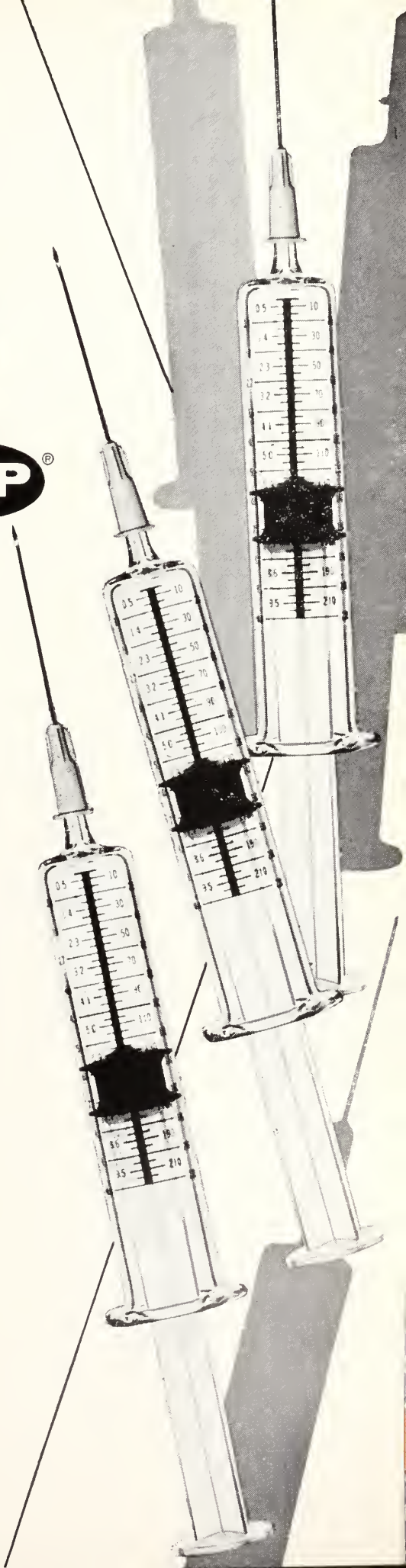
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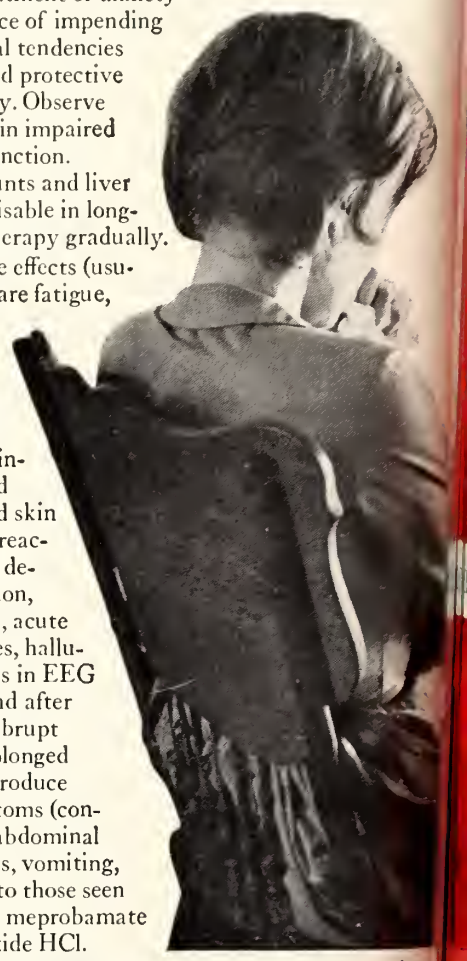


Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects–particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.



Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage: *Adults:* Mild to moderate psychoneurotic reactions, to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm wi cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriat patients:* 1 or 2 mg/day initially, increase gradually as need and tolerated. (See Precautions.)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 m bottles of 50 and 500.

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useful for the relief of psychic tension with associated depressive symptoms

The Journal of The SOUTH CAROLINA Medical Association

Q-WAVES

PRISONERS DIETS

SENILE DEMENTIA

X-RAY FILM OF THE MONTH

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MC 64 MARCH, 1968 NUMBER 3

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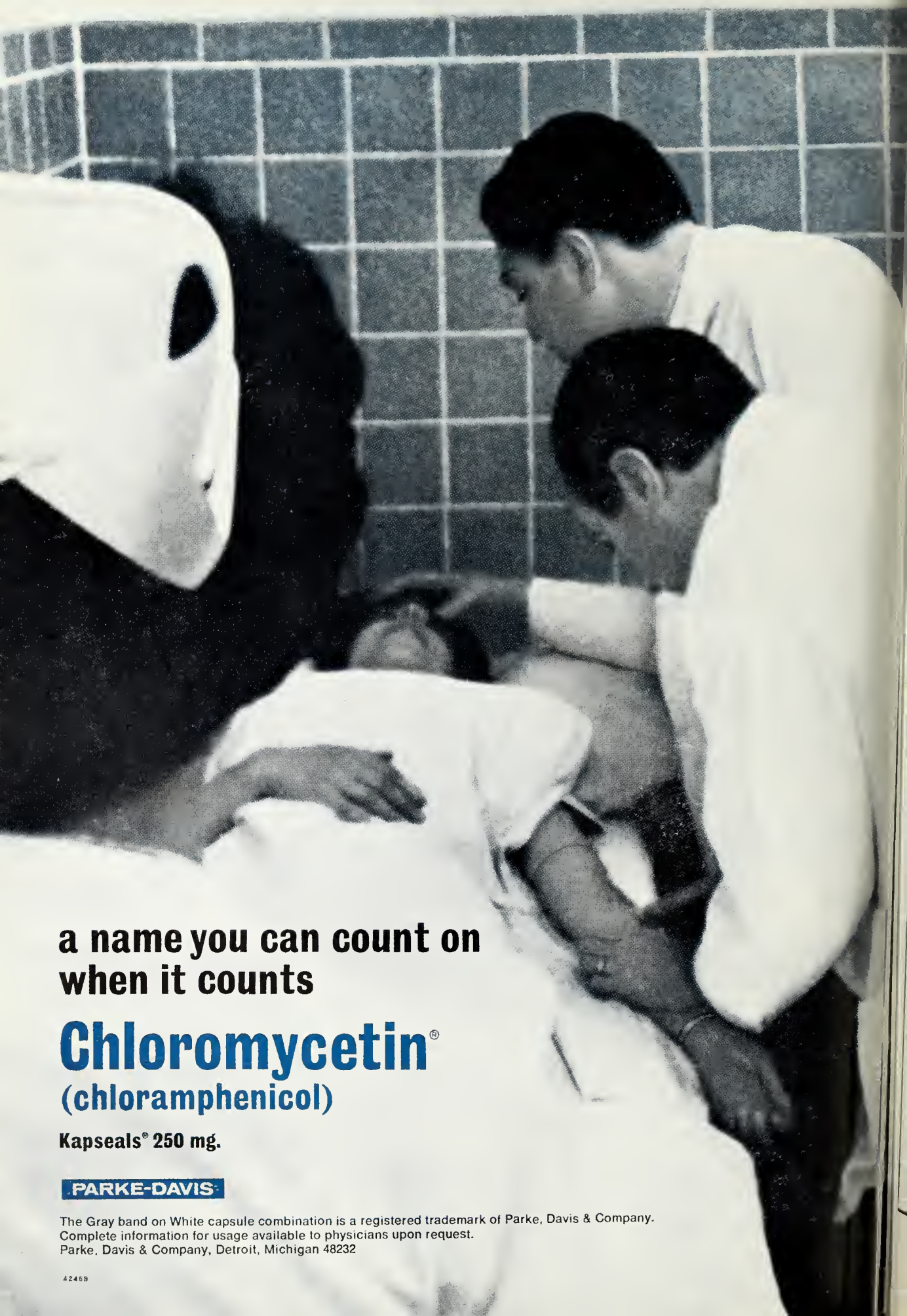
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The views expressed in this publication are those of the writers and do not necessarily reflect the opinions of the South Carolina Medical Association.

Contributions of Original Articles

Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

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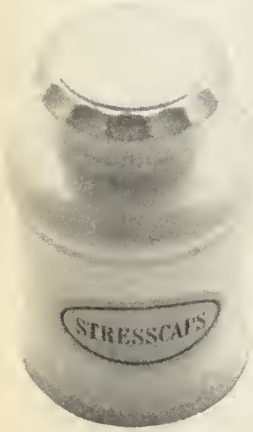
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2 Xander, G. W.: *Western Med.* 1:14 (Sept.) 1960.
3 Baker, A. G.: *Penna. Med. J.* 63:697-698 (May) 1960.
4 Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R.: *Northwest Med.* 75:1249-1252 (Nov.) 1955.

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1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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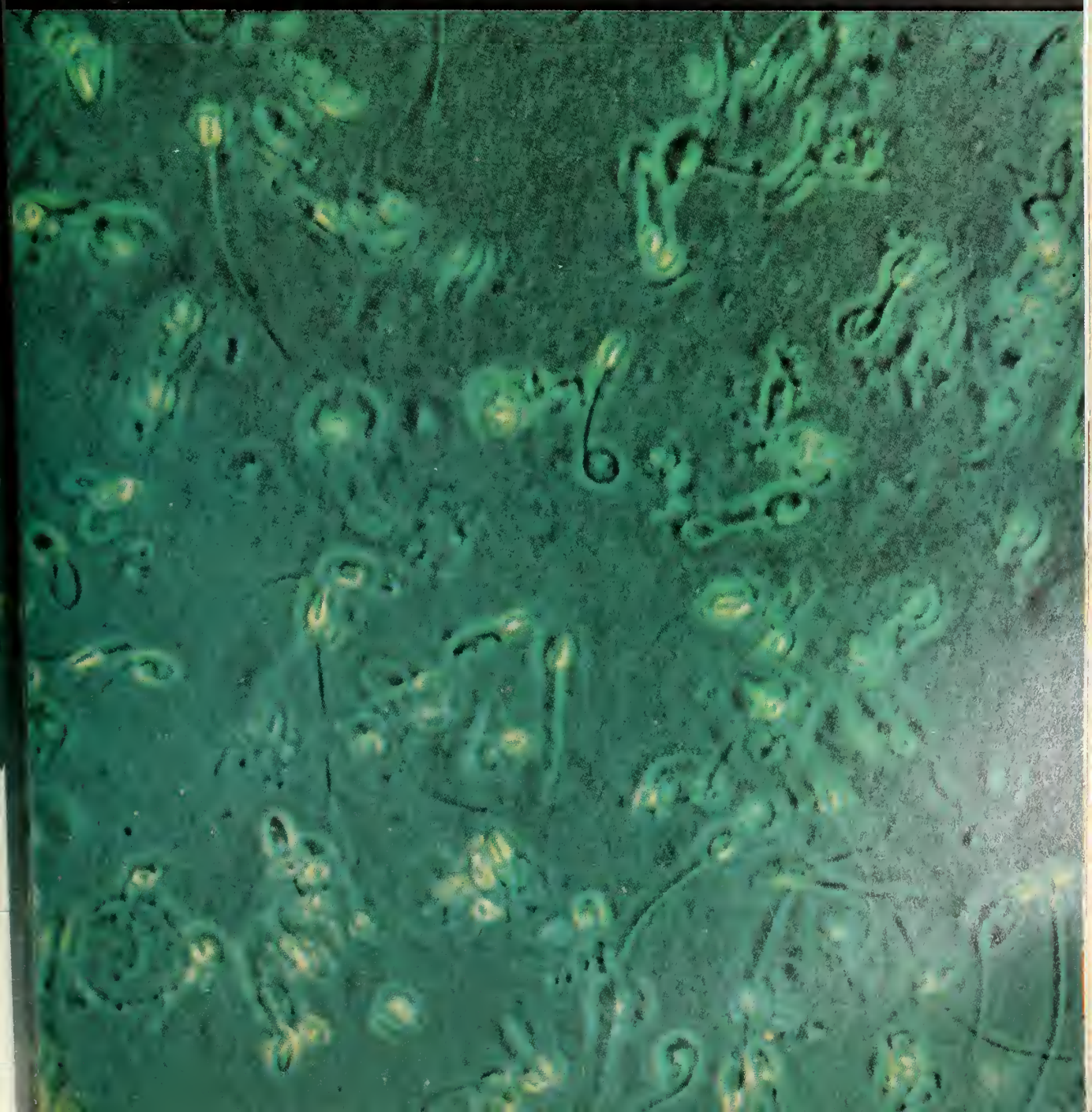
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(norethindrone 1mg. & mestranol 0.05mg)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretion, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, change in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, itching.

The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has been neither established nor disproved): thrombophlebitis, pulmonary embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine, decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

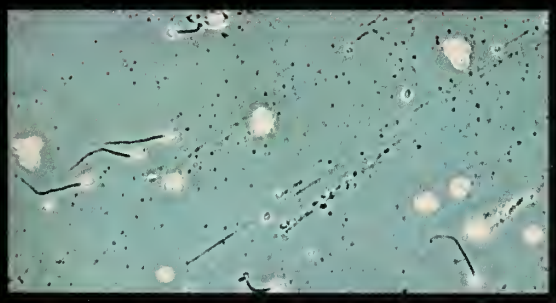
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

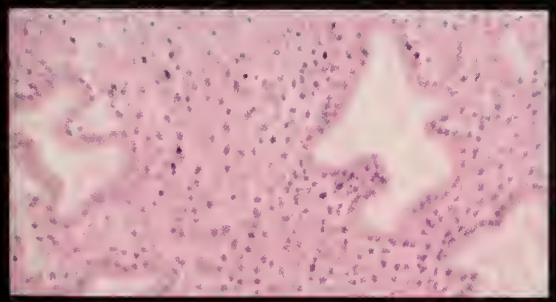
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.

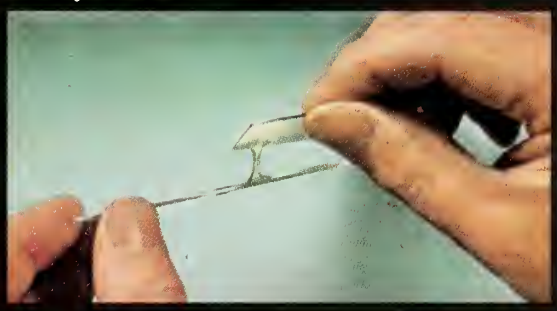


Spermatozoa appear healthy, active, freemoving.

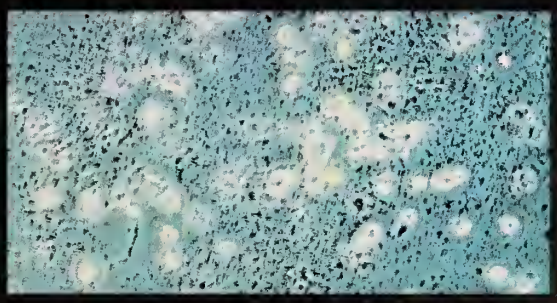


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

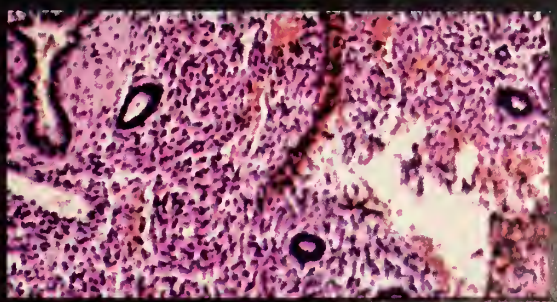
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1
(norethindrone 1mg. ē mestranol 0.05mg.) tablets

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

Night Leg Cramps . . . Unwelcome Bedfellow

In Diabetes[1], Arthritis[2], and Peripheral Vascular Disorders[2]



now . . . specific therapy for night leg cramps

Walker

QUINAMM™

Consistently effective, QUINAMM provided complete relief in 94% of 200 patients studied, many of whom were severe cases refractory to other medication.[3] Your prescription for one tablet at bedtime often controls painful night cramps with the initial dose . . . helps restore restful sleep.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

Prescribing Information: Composition: Each white, beveled, compressed tablet contains: Quinine Sulfate 260 mg. and Aminophylline 195 mg. **Contraindication:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchanism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.
References: 1. Shuman, C.: Am. J. Med. Sci., 225:54, 1953. 2. Perchuk, E., et al.: Angiology, 12:102, 1961. 3. Rawls, W., et al.: Med. Times, 87:818, 1959.
6/67 Q-706A

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient's sodium excretion is greatly enhanced. Yet potassium loss is low

The therapeutic action is smooth, and persits for a full 24 hours. With Enduron you can prescribe convenient once-a-day dosage without skimping your patients on day-long thiazide effectiveness

Of course, as with all thiazides, supplemental dietary potassium should also be considered.

Use Enduron as a basic therapy in patients with mild to moderate hypertension. A single 5-mg. tablet each day is ample in most cases.

Once a day, every day

ENDURON

METHYCLOTHIAZIDE



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

Once a day, every day

ENDURONYL

METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

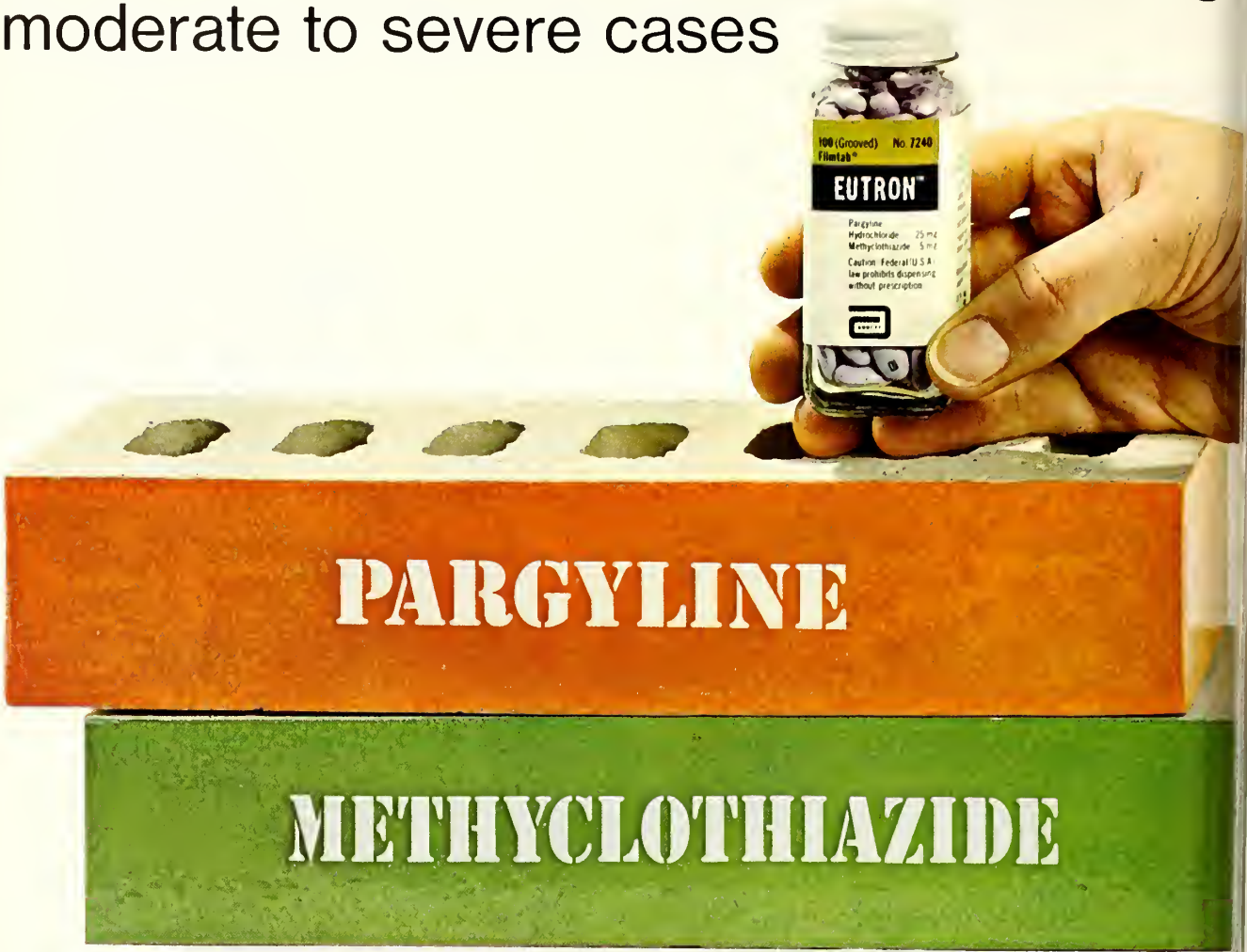
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether your patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings were reduced from 112 pre-treatment to 90 post-treatment; *sitting* from 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearly alike in all three body positions.

Use Eutron for managing your moderate to severe cases. Its building blocks enhance each other; hence lesser doses often suffice.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amendable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅓ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

801438

ABBOTT

TM-TRADEMARK



in moderate hypertension and
poorly controlled mild hypertension
(when diuretics or sedatives are inadequate, for example)

When your patients expect a lot...

like relief from hypertensive symptoms
(headache, fatigue, nervousness, palpitation or insomnia, for example)

like an up-to-date, once-a-day dosage schedule
(a schedule not unlike timed-release medication, for example)

like a daily dose of medication for peanuts
(at 10¢ a tablet, for example)

like generally well-tolerated therapy
(as described in the package insert, for example)

...give them a little
(one tablet daily)

Regroton®

chlorthalidone 50 mg., reserpine 0.25 mg.

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-B
For details, see complete Prescribing Information.

Geigy Pharmaceuticals, Division of
Geigy Chemical Corporation, Ardsley, N.Y.

Geigy



"Upper respiratory infection! I thought everything was a 'virus' these days?"

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® in two different tablet formulations.

And let you control the dosage.

With Novahistine LP tablets and Novahistine Singlet™ tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever.

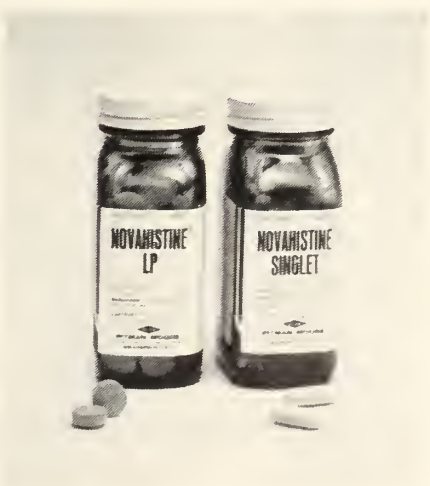
Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.

Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg



DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS

Easy on the Budget...
Easy on the Mother
Tablets & Elixir
For Iron Deficiency Anemia

FAMOUS Fergon®
brand of FERROUS GLUCONATE

BREON LABORATORIES INC.
Subsidiary of Sterling Drug Inc.
90 Park Avenue, New York, N.Y. 10016

HIGHLAND HOSPITAL
ASHEVILLE, NORTH CAROLINA
Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic need sof each patient may be realized.
Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ASCW, Coordinator of Admissions
or
Area Code 704 253-2761
Charles W. Neville, Jr., M.D.
Assistant Professor of Psychiatry and Medical Director

b.i.d.

The sensible schedule that covers the patient day and night

If your objective in the use of a broad-spectrum antibiotic is prolonged action, with high blood levels, then you know why b.i.d. DECLOMYCIN is considered to be a sensible dosage schedule.

The maintenance dosage of DECLOMYCIN can be kept at this convenient schedule because of its unusually high effective blood and tissue levels.

The b.i.d. dosage of DECLOMYCIN gives you the comfortable assurance that the patient is well-covered, *day and night.*

In clinical practice, blood levels produced by a therapeutic dose of DECLOMYCIN are high, prolonged, and effective; because of high serum binding and slow renal clearance. And if there's a broader susceptibility pattern of organisms, we've yet to see it.

There is no need to give higher daily dosage than 300 mg b.i.d., except in venereal diseases and Eaton Agent pneumonia.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle

Prescribing information on next page.

b.i.d. The sensible schedule that covers the patient day and night

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm. given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

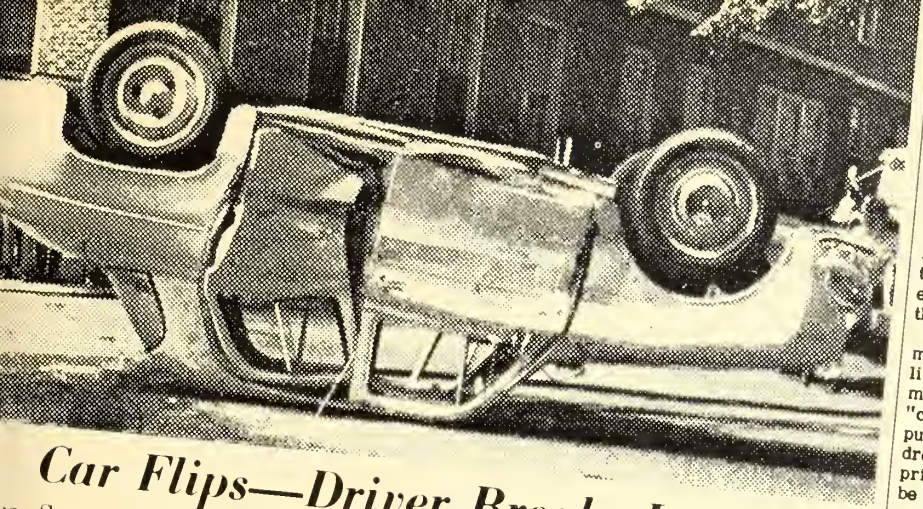
Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg. of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg. every 6 hours for a minimum of 4 doses or 300 mg. every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg. every 6 hours or 300 mg. every 12 hours until a cure is effected.

Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg. in 3 divided doses for six days.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, N.Y.

Lederle

491-7—6046



STAFF PHOTO

Car Flips—Driver Breaks Leg

...s, Sept. 7. John P. Jones of ... incurred a broken leg today ... driving ... Patrolman B. R. Brown, the car hit a fire hydrant and flipped over on its ... Hasn't he ... ...itor

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He's had enough excitement for one day.

For the patient who has been through an accident, the worry and anxiety following the experience may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—*to take the nervous "edge" off,* so the rest of the formula can control the pain more effectively.

Phenaphen® with Codeine

Phenaphen® with Codeine No. 2, No. 3, or No. 4 contains: *Phenobarbital* (¼ gr.), 16.2 mg. (Warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4). (Warning: may be habit forming).

THE COMPOUND ANALGESIC THAT CALMS INSTEAD OF CAFFEINATES

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** 1 or 2 capsules at 2 to 4 hour intervals, or as directed by physician. For further details see product literature.

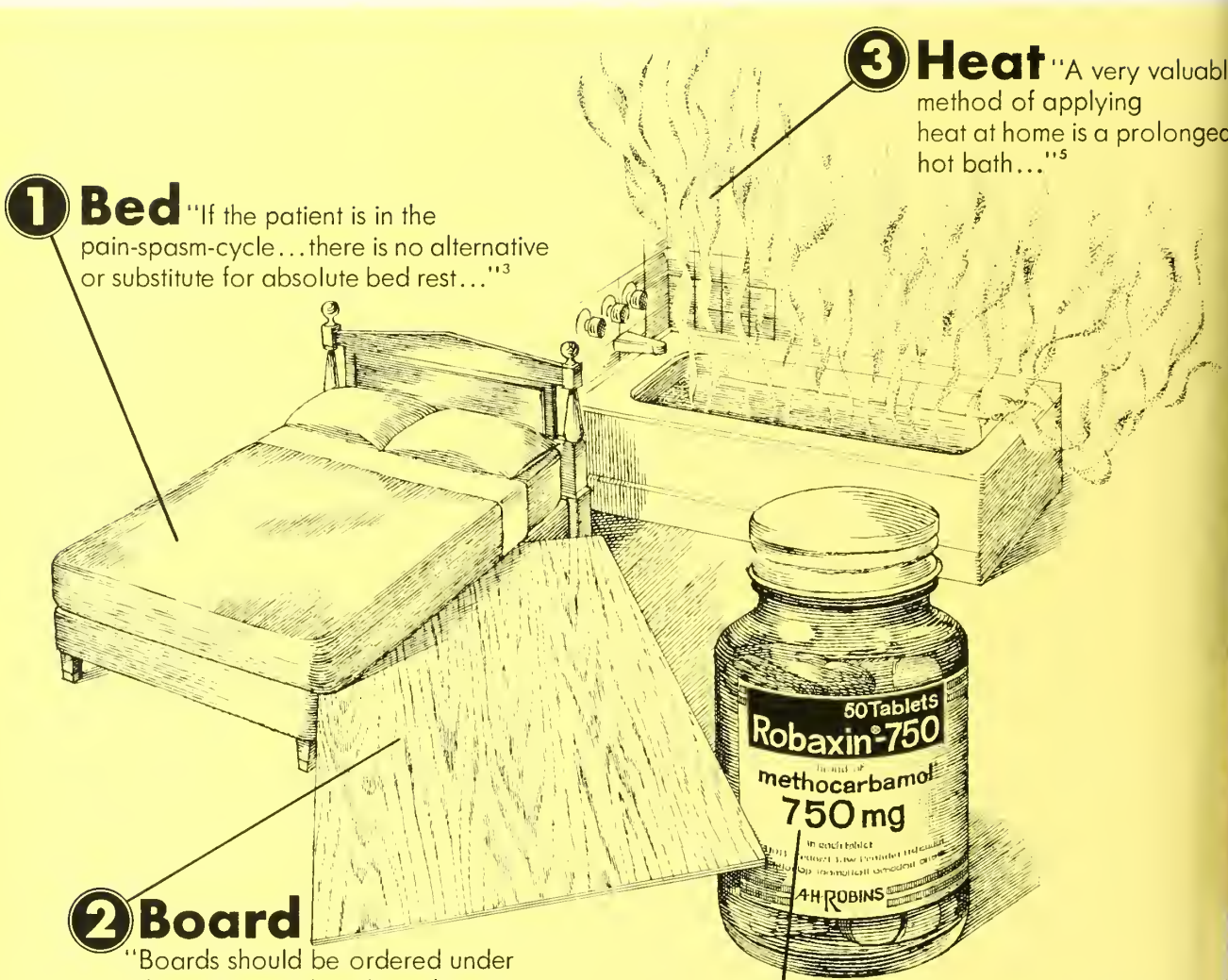
A. H. ROBINS COMPANY
RICHMOND, VA. 23220 A·H·ROBINS



LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:



1 Bed "If the patient is in the pain-spasm-cycle...there is no alternative or substitute for absolute bed rest..."[3]

2 Board "Boards should be ordered under the mattress...these boards act by immobilizing the spine..."[4]

3 Heat "A very valuable method of applying heat at home is a prolonged hot bath..."[5]

4 Robaxin®-750 (methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "...without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated far relief af skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nausea) may accur rarely, but usually disappear an reduced dasage. Hypersensitivity reactians develap infrequently. See praduct literature far further details. **Also available:** Rabaxin® Tablets (methacarbamal, 500 mg.) Rabaxin Injectable (methacarbamal, 1 Gm./10 cc.)

References: (1). Gadfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gattschalk, L.A.: GP 33:91, 1966. (3). Rawe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cazen, L.: Sauth Dakata J. Med. 18:26, 1965. (5). Sata-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteapath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New Yark J. Med. 62:1985, 1962.

A·H·ROBINS A. H. ROBINS COMPANY RICHMOND, VIRGINIA 23220



"Yes, Doctor, the pain is gone."

EMPIRIN'® COMPOUND with CODEINE PHOSPHATE gr. 1/2 No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar
fluocinolone acetonide





For everyday topical steroid therapy

Synalar® 0.01%

fluocinolone acetonide provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

fluocinolone acetonide – an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.





in the bronchitis-emphysema syndrome ...bronchodilation without pressor effects

Most bronchodilators for use in pulmonary emphysema contain ephedrine-like drugs. ELIXOPHYLLIN® never did. So, ELIXOPHYLLIN will not cause tachycardia, palpitations, nervousness, insomnia, or other undesirable side effects of ephedrine-like products. Even patients with hypertension, cardiac insufficiency, hyperthyroidism, prostate hypertrophy and glaucoma can take ELIXOPHYLLIN.

Other advantages of ELIXOPHYLLIN: rapid and sustained bronchodilation • proven increase in pulmonary function • adrenergic abuse eliminated.

ELIXOPHYLLIN is theophylline in free and soluble form—resulting in rapid and dependable absorption with less risk of gastric irritation.

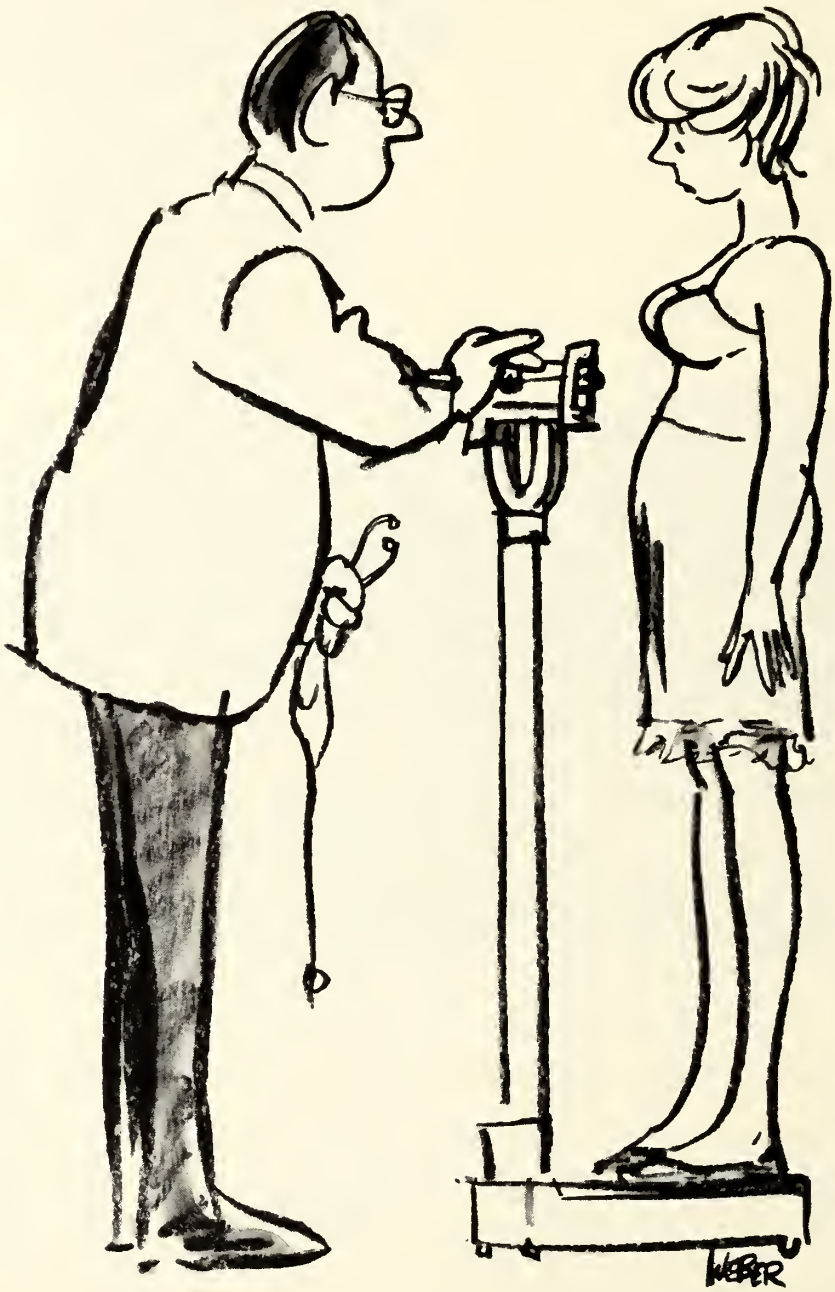
Adult maintenance dosage in bronchitis and pulmonary emphysema: one ounce (30 ml.) t.i.d. on arising, at 3 P.M., and on retiring. Adjust dosage to patient response. This average dosage provides continuous bronchodilation. Do not administer other xanthine preparations concurrently. May be contraindicated in peptic ulcer.

ELIXOPHYLLIN®

Each 15 ml. contains theophylline (anhydrous) 80 mg.; alcohol 20%

Sherman Laboratories

Detroit, Michigan 48211



"You're up ten pounds since your last physical. We're going to have to do something about that."

Get them while they're easily reversible.

Obesity doesn't happen suddenly. This insidious process has its beginning—and the chances of reversing it are better—during the *first 10 to 15 pounds of weight gain.* When a new dietary pattern must be established, consider the adjunctive use of BAMADEX SEQUELS. Combining the proven *anorexigenic* action of d-amphetamine with the *tranquilizing* effect of meprobamate, BAMADEX SEQUELS controls appetite throughout the day, usually with a single capsule daily.

Contraindications: Dextro-amphetamine sulfate: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Bamadex® Sequels®

Dextro-amphetamine sulfate (15 mg.) with Meprobamate (300 mg.) **Sustained Release Capsules**

Lederle

LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York

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SAN FRANCISCO AMA '68

The excitement of San Francisco's famous sites is waiting for you. Chinatown, the Golden Gate Bridge, Fisherman's Wharf, Telegraph Hill, will add to five memorable and stimulating convention days. Plan to attend now and look forward to an excellent convention in a city of unlimited charm.

Continue your postgraduate education with a varied program of • four General Scientific Meetings on Auto Accidents, Health Care Planning, Infectious Diseases, Treatment of Advanced Malignant Disease • 23 Section Programs • Color Television • Medical Motion Pictures • and over 600 scientific and industrial exhibits. All are designed to bring you up-to-date on what is making medical news today. You will attend lectures by the nation's outstanding medical authorities and discuss with them the significant advances in medicine.

In addition the AMA TV network will present more than 40 hours of convention news.

Reserve now for the Scientific Awards Dinner in honor of the Scientific Award Winners—Wednesday, June 19, 1968. Since space is limited, we suggest you make your reservations before June 3, 1968. Tickets are $10.00 each, payable in advance.

The complete scientific program, plus forms for advance registration and hotel accommodations, will be featured in JAMA, May 6, 1968.

SAN FRANCISCO, CALIFORNIA · JUNE 16-20, 1968

AMERICAN MEDICAL ASSOCIATION'S 117th ANNUAL CONVENTION · BROOKS HALL

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

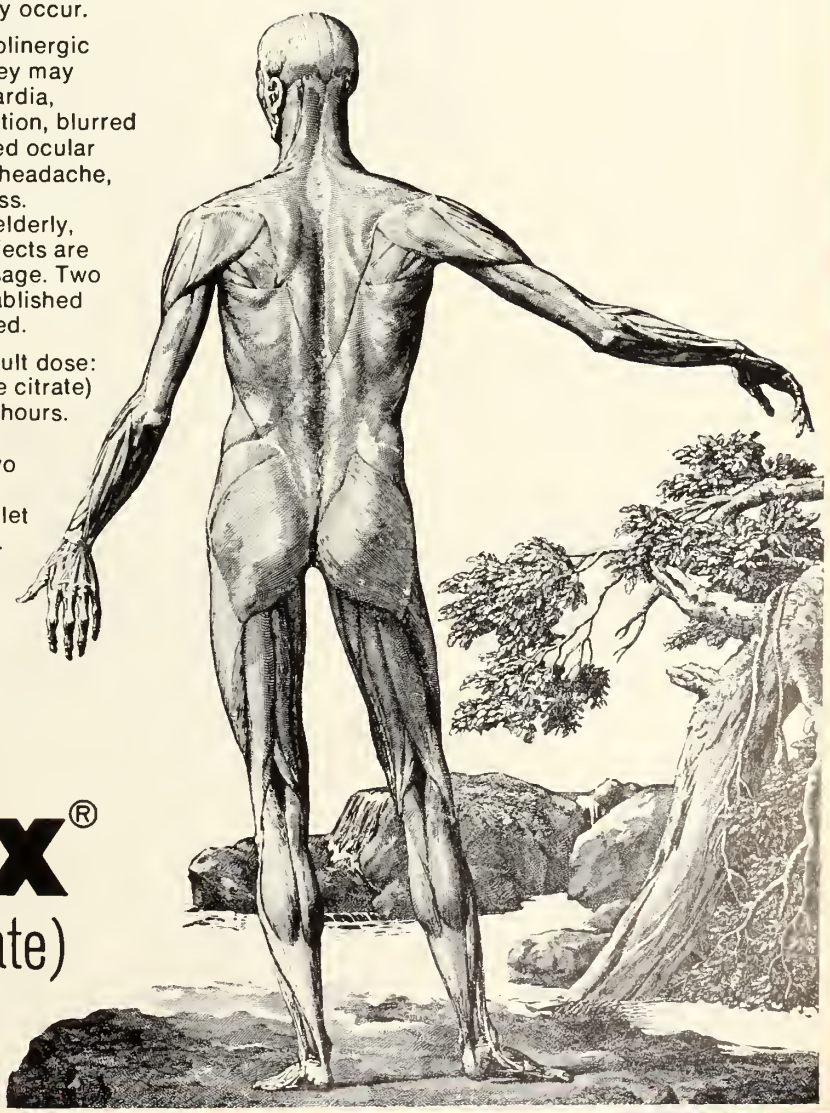
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
Northridge, California 91324



Norflex®
(orphenadrine citrate)

Chances are she'll be fever-free in less than 48 hours...



with Erythrocin®-Sulfas

ERYTHROMYCIN-
TRISULFAPYRIMIDINES,
ABBOTT

FOR RAPID CLINICAL RESPONSE

In a recent series of clinical studies, Erythrocin-Sulfas was used to treat 516 febrile cases of suspected bacterial infection. Of these, *85.5% were completely afebrile within 48 hours.*

FOR WIDE BACTERIAL COVERAGE

Among the total of 661 patients (febrile and afebrile) who could be evaluated, the *clinical cure rate* was 92.2%*

FOR OPTIMAL PATIENT ACCEPTANCE

Three forms were used in the studies, prescribed according to the age and personal preferences of individual patients:

Erythrocin® ethyl succinate-**Sulfas Granules**
erythromycin ethyl succinate-trisulfapyrimidines
for oral suspension

Erythrocin® ethyl succinate-**Sulfas Chewable**
erythromycin ethyl succinate-trisulfapyrimidines
chewable tablets

Erythrocin® stearate-**Sulfas Filmtab®**
erythromycin stearate-trisulfapyrimidines tablets

Please see Brief Summary on next page.

ABBOTT

*Clinically cured included patients with complete symptomatic relief and those who had partial symptomatic relief within 72 hours with subsequent clinical cure.

803446

BRIEF SUMMARY FOR Erythrocin®-Sulfas

Indications For mixed infections which are more susceptible to the combination than to either agent alone. These may include susceptible gram-positive and/or gram-negative mixed infections. Not recommended in the treatment of infections expected to respond to full therapeutic doses of the antibiotic or sulfonamide alone.

Contraindications Known hypersensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, in premature or in newborn infants during first week of life.

Warnings As with other forms of sulfonamide therapy, use only after critical appraisal in patients with liver or kidney damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests when used intermittently or for long periods.

Precautions, Side Effects Use sulfonamides with caution in patients with a history of allergy, including asthma. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent; if encountered appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. In prolonged therapy, or when high dosage is used, maintain an alkaline urine. If oliguria occurs, discontinue therapy. Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin; generally improved by reduction of dosage.

If overgrowth of nonsusceptible organism occurs, withdraw the drug and institute appropriate treatment.

Adverse Reactions Sulfonamide therapy may be associated with headache, nausea, vomiting, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, urticaria, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria. 803446

ABBOTT

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



TUBERCULIN,TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

Lederle

330—8/6135

Duo-Medihaler

Isoproterenol HCl (4 mg. per cc.) and phenylephrine bitartrate (6 mg. per cc.)

acts in seconds... lasts for hours



a therapeutic difference

Riker Riker Laboratories, Northridge, California 91324



**Breathing's
a snap again,"
he said
gingerly.**
(COMPLIMENTS OF
DIMETAPP)

Help clear up that miserable stuffed-up feeling with Dimetapp. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done... in a hurry.

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220
A·H·ROBINS

In sinusitis, colds, U.R.I.
Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

Up to 10-12 hours clear breathing on one tablet



If hypothyroidism leaves your patient feeling like this...

consider

LETTER®

(SODIUM LEVOTHYROXINE, ARMOUR) TABLETS

Synthetic Thyroid Replacement Therapy



Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

ARMOUR PHARMACEUTICAL COMPANY • CHICAGO, ILLINOIS



"The inconvenience of a cold"

a cold, NTz® Nasal Spray provides rapid relief of al ymptoms. Relief starts with the first spray which en he inferior part of the common meatus. A second ay a few minutes later, will shrink the turbinates to p rovide sinus drainage and ventilation. Dosage y repeated every three or four hours as needed, te porary relief of symptoms. NTz is well tolerated ov rdosage should be avoided.

a sinusitis deterrent, NTz Nasal Spray can be used to p e nasal passages open during a cold to help pre- t velopment of acute sinusitis—or to help prevent ac te condition from becoming chronic.

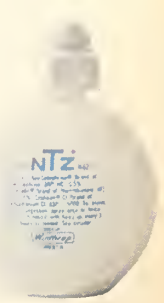
pl d: NTz Nasal Spray, plastic squeeze bottles of ml NTz Nasal Solution, bottles of 30 ml. (1 fl. oz.) opper.

NTz is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.



Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Valium® (diazepam) useful adjunct for the coronary patient...

When oppressive feelings and psychic tensions are severe and cooperation with the physician poor, it may be helpful to add adjunctive Valium (diazepam), 10 mg or 5 mg t.i.d., to the coronary patient's regimen. Valium (diazepam) helps to promote the needed relaxation that the patient requires to make him less preoccupied with his condition and more inclined to cooperate in, and benefit from, the total therapeutic program. Valium (diazepam) may be administered in the presence of secondary depressive symptoms.

in the hospital...

(5 mg or 10 mg t.i.d.)

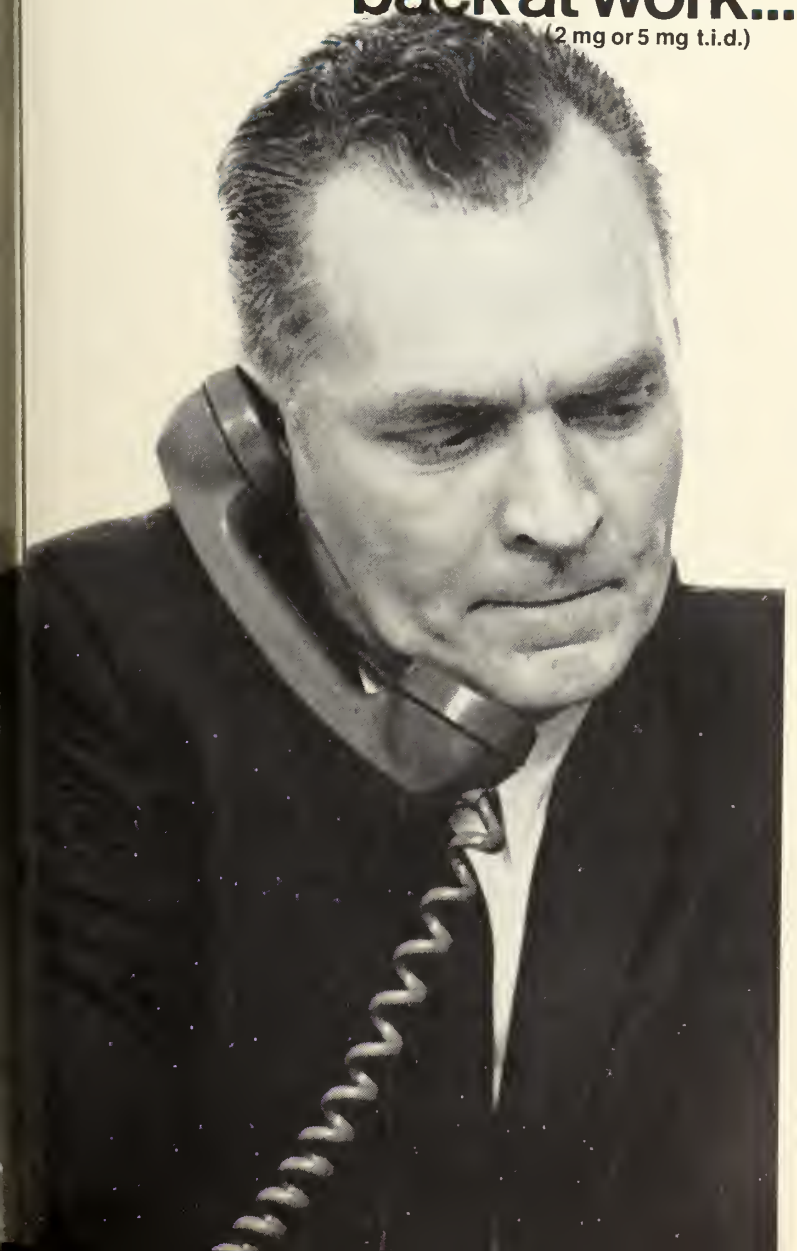


convalescing...
(2 mg or 5 mg t.i.d.)

The heart patient who leaves the hospital to enter a period of slow restorative treatment is often forced to make emotionally difficult adjustments. The resulting stress of this period may again cause psychic tension to mount to potentially harmful levels. To augment your reassurance and the emotional support of his family, a 2 mg or 5 mg t.i.d. regimen of Valium (diazepam) can reduce psychic tension and thereby help the patient to accept necessary restrictions more calmly, and to adjust to his illness more realistically.

back at work...
(2 mg or 5 mg t.i.d.)

Getting back to work presents additional stresses for the cardiac patient. There are often anxiety-producing features in the job which can be more significant than the physical or intellectual demands of the work. Valium (diazepam), 2 mg or 5 mg t.i.d., may be a useful adjunct to reduce overreaction to these stresses and thus help the patient to face job situations more calmly and rationally.



Valium® (diazepam)
to help relieve psychic tension

and for the patient with tension-induced sleeplessness, remember the value of an extra tablet at bedtime

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states, moderate to severe psychoneurotic states with anxiety, apprehension or agitation alone or with depressive symptoms; somatic complaints which are concomitants of emotional factors; acute agitation due to alcohol withdrawal; muscle spasm associated with cerebral palsy and athetosis.

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d.

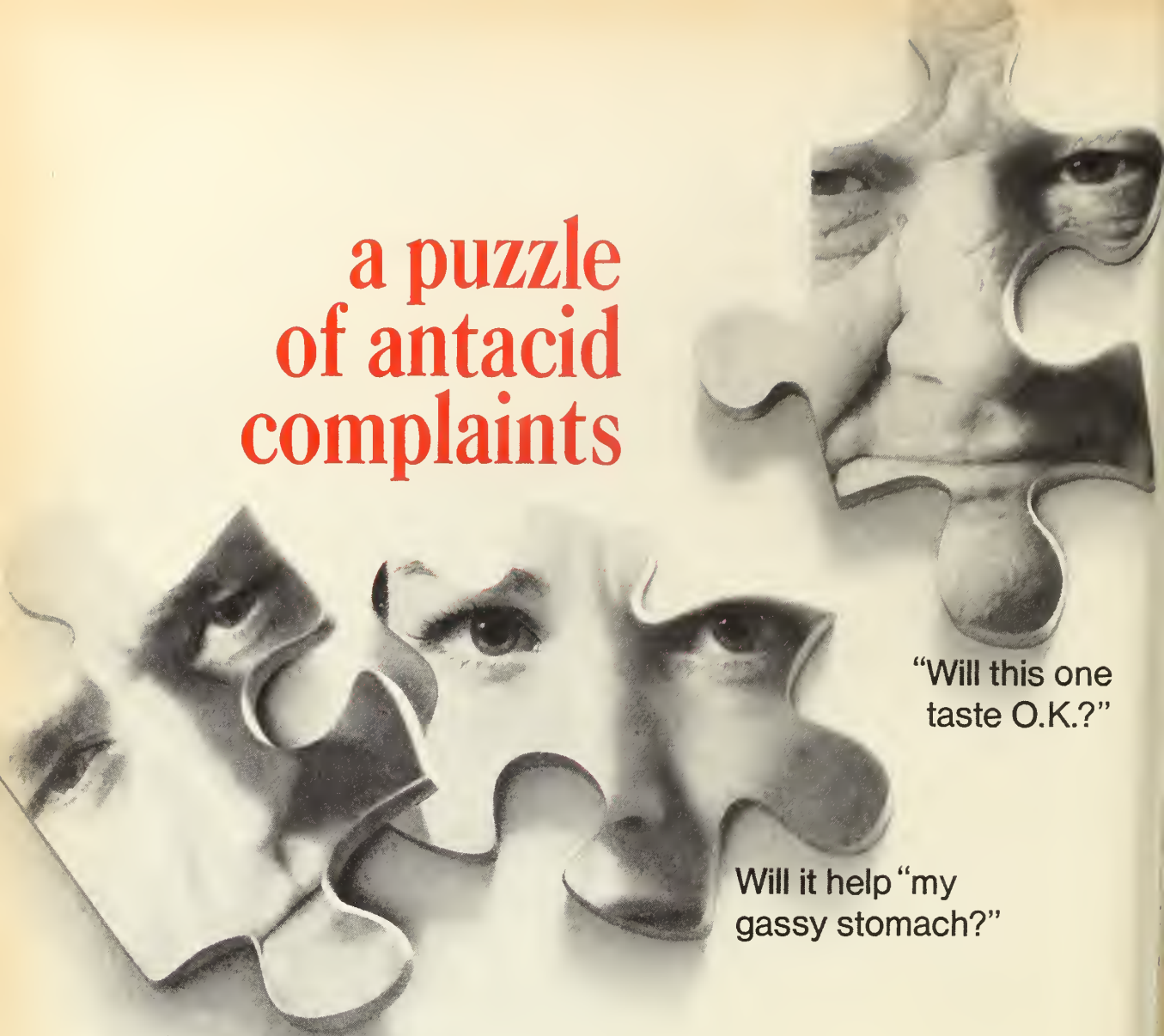
Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions.)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

ROCHE

Roche
LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

a puzzle of antacid complaints



Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

a solution to peptic ulcer distress

Effective neutralization—
with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

Concomitant relief of G.I. gas distress—
with the proven[1] defoaming action of simethicone.

Prolonged acceptance confirmed—
in 87.5% of 104 patients after a total of 20,459 documented days of therapy.[2]

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg.
Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart

Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.



When you can't control the cause...

you can control its effect.

PALOHIST

An antihistamine-decongestant available in slow release capsules containing phenylephrine hydrochloride, 25.0 mg.; chlorpheniramine maleate, 7.5 mg.; pyrilamine maleate, 25.0 mg.; methapyrilene hydrochloride, 12.5 mg. Also available as liquid in regular non-sustained release dosage.

PALOHIST MILD

Same sustained release capsules and formula as PALOHIST except in one-half strength per capsule.

HISTOR-D

A sustained release capsule that allows prompt symptomatic relief and a continuing release of remaining medication over a period of 6 to 10 hours. Each capsule contains chlorpheniramine maleate, 8 mg.; phenylephrine HCl, 20 mg.; methscopolamine nitrate, 2.5 mg.

℞

Complete information for usage available to physicians upon request.

PALMEDICO, INC. • Drawer 3397 • COLUMBIA, S. C.



Now...twice as much as before in each teaspoon

400,000 units of potassium penicillin V per teaspoonful

New...V-Cillin K®, Pediatric, 250 mg.

Potassium Phenoxymethyl Penicillin

Lilly

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

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The Journal
of the
South Carolina Medical Association

VOLUME 64 MARCH, 1968 NUMBER 3

SOUTH CAROLINA
PRISONERS TO GET BALANCED DIETS

E. J. LEASE, PH.D.
R. E. LEDESMA, B.S., M.T. (ASCP)
B. W. DUDLEY, M.A.

School of Pharmacy
University of South Carolina
Columbia, South Carolina

The modern concept is to train the prisoner so that he is better qualified to earn a living when he is allowed to return to his community. It is essential that the individual have good health as well as good training if he is to become an asset. With this in mind, the South Carolina Department of Corrections requested the University of South Carolina to evaluate the diets of inmates and make suggestions for practical improvements.

About one-half of the food for the inmates of the South Carolina Department of Corrections is produced on the State operated farms and processed in the department's cannery, corn mill, and slaughter house. The other half of the food is purchased in large quantities wherever greatest economy can be obtained. A good crop on the farm or a low market price frequently determines what is on the menu; however, an attempt is made to give the inmates as wide a variety of foods as the budget permits. Approximately 2400 inmates, averaging 24.5 years of age, are being fed three meals a day. The department has five separate food service facilities in the Columbia area. Food is made available to the inmate in a cafeteria line on a "serve yourself" basis, where the inmate can take all he wants but is requested to eat all he takes, with the exception of meats and deserts which are served individually. Tables to seat four and colorful decor create a pleasant atmosphere in the dining room.

Before balancing the diets of the South Carolina prisoners, a literature search was made to determine what other states were doing and had done in relating diets to nutritional needs. The history of the American prison goes back to 1790 when the Walnut Street Prison of Philadelphia abolished the selling of liquor to inmates as one of the ills condoned at the old colonial prison.[1] Records of these early years show that prisoners were not allowed to converse at meals and that the less talkative women were rewarded with tea. The Philadelphia Society for Distressed Prisoners concerned itself before 1800 with visiting the prison, furnishing food and other activities. Dr. Benjamin Rush, one of the first penal reformers,

envisioned a system with individual cells for prisoners and a garden for growing vegetables which could be cultivated by prison labor. This progressive spirit of reform was abandoned in the 19th century and lay dormant until our time.

By 1835 only New York, Baltimore, and Frankfort, Ky. had provided dining room accommodations to ease the monotony of prison life.[2] In other parts of the nation, prisoners were sentenced to spend all or part of their term in solitary confinement on a diet of bread and water. Riots, which found excellent breeding grounds in the congestion of the dining hall, caused a regression to cell feeding. Cell feeding, in turn, created problems of sanitation. In the mid-nineteenth century the New Hampshire prison required its inmates to arise at 4:30 a.m. and work two hours before breakfast, but did feed them well on beef, rye bread, Indian bread, potatoes, beans, and peas. The American prisons began spending twice as much per man per day for food as did English prisons but solitary confinement was accompanied by rations of bread and water.[3]

The first scientific study of prison nutrition was conducted in the Elmira, New York, State Prison and was published in 1893. By the 1920's some old practices were still being followed, and the Spartanburg, South Carolina county jail had so many cases of pellagra that the United States Public Health Service used it as a laboratory for studying this nutritional disease. In many areas of the nation clinical cases of riboflavin deficiency as well as pellagra could be found in prisons where the amount of money spent for food was below that necessary for an adequate diet. Today prisons put stress on sanitation for inmates who are assigned to food serving and preparation.[4] The American Correctional Association advocates an adequate diet for inmates.[5] Since 1942 the use of synthetic vitamins, applied nutritional science, and a better standard of living have made clinical cases of malnutrition rare, but subclinical cases are more common than is appreciated by the average physician or public health leader. This background motivated an investigation using the more sophisticated methods of diagnosis to detect malnutrition if it existed among inmates who at a glance appeared healthy. A more complicated subject for future research with inmates is the effect of diet on behavioral psychology.[6-16] It is noteworthy that the subjects for this study included inmates who had donated five pints of blood per year to the Blood Bank Program in exchange for a shortened prison sentence.

Methods

Information on the dietary intake was obtained by carefully weighing the total amount of each food item consumed at the Manning Correctional Center in Columbia, S. C. The total amount of each ingredient consumed during a thirteen day period divided by the number of inmates eating in the institution's cafeteria determined the average dietary intake per inmate.

A daily intake of specific nutrients was computed by referring to the United States Department of Agriculture Home and Garden Bulletin No. 72, "Nutritive Value of Foods." The adequacy of the diets was determined by comparison with the recommended dietary allowances of publication 1146, "Dietary Allowances," National Research Council. These widely accepted standards recommend that men receive 2900 calories, 70 grams of protein, 0.8 gram calcium, 10 mg of iron, 5000 international units of vitamin A, 1.2 mg of vitamin B_1, 1.7 mg of riboflavin, 19 mg of niacin and 70 mg of vitamin C per day.

Ten ml of blood were collected from each inmate. The blood was drawn into 10 ml vacutainer tubes which contained 10 mg of EDTA in powered form. The tubes of blood were transported immediately to the laboratory in a styrofoam chest packed with crushed ice.

A hemoglobin determination was performed on 0.02 ml of blood by the cyanomethhemoglobin method described by Hainline.[17] In order to check the hemoglobin values and to establish the volume of packed red cells, a microhematocrit determination was performed.[18] The vitamin C content of whole blood was determined on 5 ml by a modification of the photometric procedure described by Bessey and associates.[19] Five ml of whole blood was assayed for riboflavin content by the fluorometric

procedure described by Burch.[20] A total iron content of whole blood was determined using a modification of the procedure described by Wong.[21] The total protein albumin-globulin ratio was determined by the biuret technique.[22]

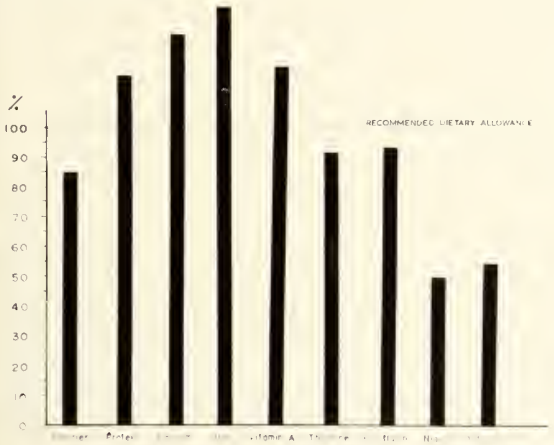


Figure 1

Dietary Intake of Inmates Before Diet Improvement

The Recommended Dietary Allowances for males age 18 to 35 are calories—2900, protein—70 grams, calcium—0.8 grams, iron—10 mg, vitamin A—5000 International Units, vitamin B_1—1.2 mg, vitamin B_2—1.7 mg, niacin—19 mg, and vitamin C—70 mg.

Results and Conclusions

The analysis of the diets before making improvements showed that vitamin C and niacin were the most deficient nutrients (Figure 1). This was readily explained by the fact that the budget was too low to permit serving orange juice, tomato juice, or fresh fruit. Likewise, the niacin content of the diet was low because meat is too expensive to serve generously.

In order to confirm the dietary studies and be sure the inmates needed more vitamin C, blood studies were conducted (Table 1). The correlation was perfect in that the inmates had an average of sixty percent as much blood vitamin C as is recognized as normal and the average diet contained sixty one percent as much vitamin C as the recommended dietary allowance.

Proof that vitamin C would improve the blood picture was obtained by giving twenty of the inmates an orange flavored drink prepared in the laboratory containing the recommended dietary allowance of 70 mg of synthetic vitamin C per man per day (Table II). In a two week period their blood vitamin C level increased an average of 112%. This evidence justified giving all the inmates enough additional vitamin C to balance their diets. The budget demanded that the least expensive source of vitamin C and niacin be used. Since the inmates had coffee at breakfast, milk at lunch, and water as the only drink at supper, the orange drink was given at supper every evening. Each man was given six ounces of a commercially prepared synthetic fruit flavored drink which contained one-half of the recommended dietary supplement to bring the level of these nutrients to one hundred per cent of the recommended level. The use of pure vitamins is considered as an interim measure only, until such time as adequate amounts of lean meat and fresh fruits can be used to balance these diets.

Laboratory results on blood and urine samples taken after this dietary supplement had been in effect for one month indicated that this commercial product provided an adequate increased nutrient

Table I

Blood Composition of Prisoners Before Diet Therapy

	Mean Value	Observed Range	Minimal Normal Value	Per Cent Of Normal
Hemoglobin	14.3 g/100 ml	15.9 to 11.2	16.0 g/100 ml	89
Hematocrit	41	46 to 35	42	98
Riboflavin	13.1 ug/100 ml	18.7 to 8.4	8.7 ug/100 ml	151
Total Protein	7.3 g/100 ml	8.2 to 6.8	7.0 g/100 ml	104
Albumin-globulin ratio	2.3 g/100 ml	2.5 to 2.0	2.5 g/100 ml	92
Ascorbic Acid	0.54 mg/100 ml	1.22 to 0.19	0.90 mg/100 ml	60

Table II

Effect of Synthetic Vitamin C on the Blood of Prisoners

Inmate code number	Days given 70 mg Vitamin C	Blood Levels: Before giving Vitamin C mgs/ 100 ml	Blood Levels: After giving Vitamin C mgs/ 100 ml	Increase in Blood Level of Vit. C Per cent
1	19	0.47	0.73	55
2	19	0.22	1.09	395
3	17	0.19	0.83	336
4	14	0.33	0.63	91
5	17	0.38	0.82	115
6	18	0.50	0.73	46
7	15	0.38	0.75	97
8	19	0.55	1.34	144
9	17	0.88	1.61	83
10	16	0.44	0.99	125
11	19	0.44	1.56	255
12	14	0.80	1.46	83
13	14	1.00	1.86	86
14	14	0.88	1.04	18
15	14	0.77	1.15	49
16	13	0.72	1.46	103
17	12	0.50	0.63	26
18	14	1.00	1.25	25
19	14	0.77	1.04	35
20	13	0.55	0.94	71
				112% Mean Increase

The established lower limit of blood ascorbic acid is 0.9 mg/100 ml.

Table III

Effect of Ascorbic Acid and Niacin on the Blood and Urine of Prisoners

Inmate code number	Days Given 23 mg Vitamin C 8 mg Niacin	Blood Levels: Before Giving Vitamin C mg/100 ml	Blood Levels: After Giving Vitamin C mg/100 ml	Increase in Blood Level of Vit. C Per cent	Urine N'methylnicotinamide per. gm. Creatinine mgs
21	30	0.38	1.35	255	4.5
22	30	0.47	1.15	144	8.0
23	30	0.30	1.70	466	5.7
24	30	0.47	0.90	91	7.5
25	30	0.29	1.50	417	4.0
26	30	0.39	1.52	289	3.5
27	30	0.43	1.60	272	5.1
28	30	0.55	0.85	54	7.0
29	30	0.25	1.65	560	3.5
30	30	0.42	1.50	457	4.2
31	35	0.75	1.50	100	7.4
32	35	0.88	1.37	55	—
34	35	0.44	1.52	245	3.6
35	35	0.22	1.27	477	—
36	35	0.19	2.00	952	4.3
	Average:	0.43	1.30	322	5.3

level to the diet (Table III). The average amount of vitamin C in the blood was found to be normal, which showed that they were consuming enough niacin in the diets. However, there is some question as to whether these dietary standards, which are recommendations for the average man, are sufficiently high for men who participate in the program of donating five pints of blood per year.

In the course of the studies inmate No. 10 was found to have an abnormally small amount of vitamin C in his blood (0.44 mg/100 ml). He was given the recommended dietary allowance of 70 mg of vitamin C for a period of 16 days at the end of which time he was found to have a normal level in his blood (0.99 mg/100 ml). The supplementation of vitamin C was then stopped as plans were being made to give all the inmates a fortified synthetic fruit flavored drink at their evening meal. Inmate No. 10 did not eat the evening meal but snacked at the institution's canteen. Six weeks later his blood vitamin C level had dropped to an abnormal low again (0.62 mg/100 ml). It is well known that vitamin C is not stored in the body and needs to be consumed in the diet almost daily. Consequently, this is exactly what should be expected from analysis of the blood of inmate No. 10 who is not taking the opportunity available to him by eating the balanced meals in the dining hall but rather skipping one meal a day to snack at the canteen.

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THE EVALUATION OF Q-WAVES IN LEADS 3 AND AVF IN THE ELECTROCARDIOGRAM

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Electrocardiography would be a simpler and more exact diagnostic tool if it were possible to place electrodes on the heart surface for routine tracings. But even if this were allowable, it is doubtful that the recurring question of the significance of Q waves in leads 3 and AVF would be settled in every case.

The first description of electrocardiographic changes produced by myocardial necrosis was made by Eppinger and Rothberger,[1] who injected silver nitrate deep into the left ventricle of animals and described the RST changes produced. The clinical, but not the electrocardiographic, picture of sudden obstruction of the coronary arteries was reported in 1912 by J. B. Herrick.[2] In 1918 F. M. Smith,[3] in experiments suggested by Herrick, ligated the coronary arteries in dogs and described ST elevation and later T wave inversion in their electrocardiograms. These findings were compared with tracings in three subsequently autopsied cases of coronary occlusion by Herrick[4] and found essentially identical. Thus to Herrick goes the honor of being the "father" of both the clinical and the electrocardiographic picture of myocardial infarction.

Further advances in the electrocardiographic diagnosis of coronary occlusion followed steadily. In 1920, Pardee[5] also described the RST changes in acute infarct in man. In 1928, Parkinson and Bedford[6] described the serial changes in the QRST complex following infarction in patients who survive the event for sufficient time to develop them. In 1930, Pardee[7] noted the frequency of a deep Q wave in lead 3, amounting to 25% or more of the largest deflection of the QRS complex, in slightly over one fourth of his patients with the anginal syndrome. He also found it, with considerably less frequency, in patients with right ventricular hypertrophy, and in enough cases of rheumatic heart disease or pericarditis that "it appears there is something about rheumatic invasion of the heart that gives rise to a QRS group of this sort". Deep Q waves in lead 3 were occasionally found in various other cardiopathies, and even in a few normal hearts. It was his feeling that a large Q_3 was an effect of the right ventricle, and that it represented predominance of this ventricle either through hypertrophy, or displacement or disease of the left ventricle to allow the right to predominate in lead 3. Two cases were found in normal adults.

Meanwhile, as long ago as 1916, Krumbhaar and Jenks[8] had reported the presence of deep Q waves in lead 3 in normal infants and children. These had a tendency to recede with advancing age, but were still marked in some subjects as old as 13 years. They also attributed them to predominance of the right ventricle in the young.

Following the reports of Parkinson and Bedford and of Pardee, the presence of deep Q waves in lead 3 in adults came to have a certain status as presumptive evidence of a previous myocardial infarct, and the puzzlement of the interpreter of electrocardiograms, who usually knew little or nothing about the patient, began. For example, one author[9] of a textbook on electrocardiography devoted a chapter to "The deep Q-wave in lead 3".

When unipolar leads came into general use, the problem was to a considerable extent diminished by finding that a deep

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Q_3 becomes either negligible or disappears in lead AVF, which by general consent gives a more accurate picture of what is really happening on the diaphragmatic surface of the heart than does the older lead 3. So it is usual to pay no further attention to a "significant Q_3" unless it is repeated in lead AVF.

However, a physician engaged in the routine interpretation of electrocardiograms still encounters a fair number of tracings in which both leads 3 and AVF show deep Q waves, with no evidence by history or examination of any significant heart disease. The present author has been especially impressed by the number of such cardiograms, as also noted by Pardee, among patients in our Rheumatic Fever Clinic. A review of the currently active file of 227 patients shows 8 between the ages of 10 and 17 with Q waves in leads 3 and AVF which would be considered "significant" in an adult.

It is obvious that very few electrocardiograms are made on children or even young adults unless the physician's attention is in some manner directed to the heart. It is now well established that the occasional finding of inverted T-waves in the mid-precordial leads of adults of virtually any age may be the persistence of a normal "juvenile pattern". It seems possible that since Q_3 waves have been so widely noted in juvenile patients, their occurrence in adults may occasionally represent the persistence of another "juvenile pattern". Pardee suggested an unusual distribution of the A-V bundle as a possible explanation.

Every bit of clinical information the electrocardiographer has about a patient helps him make a more accurate reading of the electrocardiogram. In no situation is this more true than when there are deep Q-waves in leads 3 and AVF. These waves can be produced by myocardial infarction, a horizontal heart, right ventricular or septal hypertrophy, a rotated heart, left ventricular hypertrophy or left ventricular degeneration, youth or the persistence of a youthful pattern. Probably the clinician is in better position than the electrocardiographer to assess the significance of Q-waves in leads 3 and AVF. And it would help to have a cardiogram made when the patient was 15 years old for comparison!

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COWPER'S GLAND CARCINOMA

REPORT OF A CASE

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KENNETH M. LYNCH, JR., M.D.**

Carcinoma originating in Cowper's gland is rare. Mery described the glands in 1684 and Cowper, more completely, in 1704. The most recent case report and complete literature review was in 1962 by LeDuc.[1] Gutierrez in 1937 reported a case of his own and gave a comprehensive discussion of the disease including the historical factors.[2] Reported below is a case of proven Cowper's gland carcinoma which, although treated, could easily represent a study of the natural history of the entity.

Case Report. F Mc., a 53-year-old negro male came to the Medical College Urology Clinic for the first time in 1961. He had seen his family physician because of difficulty in voiding. Rectal examination had given suspicion of a prostatic nodule. Examination at our clinic revealed a distinct, firm nodule on either side of the prostatic apex, almost in the external sphincter. (Fig. 1). He also had a urethral stricture in the bulbar urethra, which was dilated.

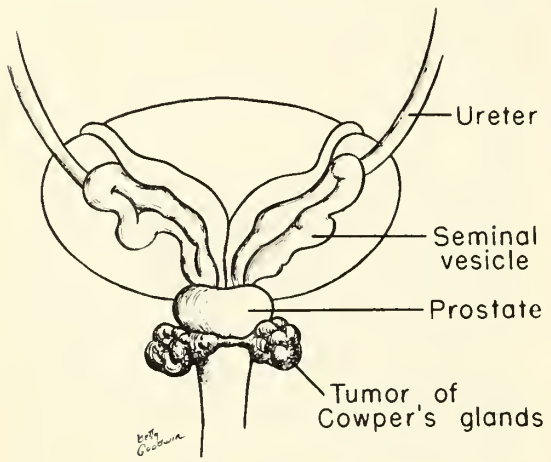


Fig. 1 Artist illustration of Cowper's Gland Tumor.

The opinion at that time was "some sort of prostatic cysts or some unusual form of prostatitis". An intravenous pyelogram, pelvic x-ray films, and acid phosphatase level all were within normal limits.

In 1962 the rectal lesion had increased to about three times its previous size, and the patient complained of pain in the left pelvis. Pelvic x-ray films showed an erosive bone lesion of the posterior ramus of the pubis bone. (Fig. 2). Biopsy of the prostatic lesion and also a bone biopsy revealed mucinous adenocarcinoma which was diagnosed as Cowper's gland carcinoma.

As there was little precedent on which to base treatment, the patient was offered a radical procedure, namely urethro-prostato-cystectomy en bloc with the left anterior and posterior ramus of the pubis bone, with supravesical diversion of urine. The patient refused the procedure.

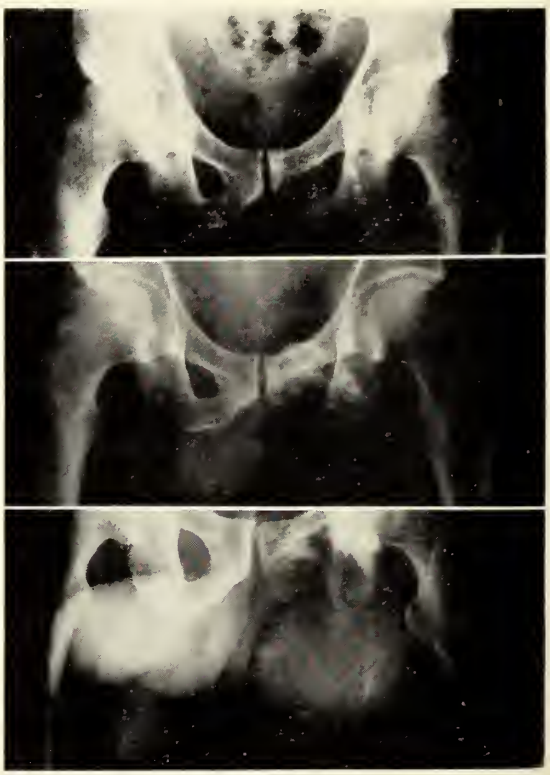


Fig. 2 Pelvic x-ray film 1963
Fig. 3 Pelvic x-ray film 1964
Fig. 4 Pelvic x-ray film 1965

The patient was followed frequently in the Urology Clinic for the next three years, continuing to refuse surgery. Frequent x-ray films and physical examination revealed the following developments: (Figs. 2, 3, 4) The tumor progressed in size. There was more and more bone erosion, as well as urethral and rectal erosion, until finally early in

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Fig. 5 Photograph of patient showing lesion in perineum and medial left thigh.

1965 the patient showed a urethro-cutaneous fistula with multiple openings on the perineum and medial side of the thigh. There was also a history of having watery stools three or four times daily and passage of gas per urethra. It was further noted that he had had increasing difficulty voiding until the apparently spontaneous rupture of the urethra into the rectum, at which time he required no further urethral dilations. At this time he was voiding without difficulty from his rectum most



Fig. 6 Photograph of patient after left hemipelvectomy, colostomy and ureteroileal cutaneous conduit.



Fig. 7 Pelvic x-ray film 1966
Fig. 8 Skull x-ray film 1966.

of the time. Again, surgery was offered to the patient, and this time he agreed. In June of 1965 an exploratory laparotomy was done which did not reveal any positive nodes along the iliac or aortic chain. An ileal conduit and colostomy were performed. Two weeks later a hemipelvectomy, cystectomy, prostatectomy and terminal colectomy were performed, as well as emasculation.

The patient had an uneventful postoperative course and adjusted well to the urinary and fecal stomas as well as to the use of crutches. (Fig. 6). For one year he did well but in March of 1966 it was noted that he had a firm mass in the area of the right pubic bone and a pelvic x-ray film revealed definite bony erosion of the right half of the symphysis as well as the anterior and posterior ramus. (Fig. 7). The patient was offered a right hemipelvectomy, but he refused. In July of 1966 he was complaining of some headache and skull x-ray films at that time revealed bone erosion in the skull. (Fig. 8) The patient has had a negative chest x-ray film at all times.

The skull lesion was examined and revealed

metastatic Cowper's gland carcinoma. Since biopsy the skull mass has grown and recently we elected to give local x-ray treatment of 2,000 R.

Summary

A case of Cowper's gland carcinoma is reported in detail and from the review of the literature is apparently the 12th reported case. Palpation of a nodular enlargement in the area of the external sphincter in the male patient who has symptomatology suggestive of urinary obstruction should make the examiner suspicious of Cowper's gland carcinoma. Although this patient was treated, in essence, this case represents a natural history of the disease in that the patient has been observed for nearly seven years. Cowper's gland carcinoma apparently grows very slowly and metastasis is almost totally by contiguity. A high index of suspicion and early treatment by wide excision is recommended.

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Neuromuscular disorders of the esophagus: A collective review—R. R. Bradham, and W. C. Sealy. Ann Thorac Surg 3:460-483 (May) 1967.

The etiology and pathogenesis of neuromuscular disturbances of the esophagus are not yet clear. Ingelfinger rasied many questions in his lucid discussion of some of the controversial basic factors, such as (1) definition of the junction of the esophagus and stomach, (2) the nature of an intrinsic sphincter of the junction, (3) the role of the right diaphragmatic crus, and (4) the overall nature and function of the barrier mechanism that normally prevents reflux of contents from the stomach to esophagus.

In neuromuscular disturbances of the esophagus, the coordination of the normal peristaltic waves and the relaxation of the sphincteric mechanisms are altered. In this review, those contributions have been selected which seem pertinent to understanding current concepts of eiology, nature of the dysfunction, recognition, and management of neuromuscular esophageal disturbances. Reference has been made to 124 prominent articles on these subjects.

A brief review of the normal physiology of deglutition is given which coordinates the actions of the pharyngoesophageal and gastroesophageal sphincteric mechanisms with the peristaltic waves of the esophagus. Stressing abnormal physiology, diagnosis, and treatment, the review is divided into sections on achalasia, chalasia, cricopharyngeal achalasia, and diffuse spasm of the esophagus. Because of the intimate relationship with these disturbances, sections are included on pharyngoesophageal and epiphrenic diverticula.

The most prevailing and logical methods of therapy for these conditions are discussed.

Viable and Nonviable Human Cartilage Homografts—R. F. Hagerty, M.D., H. L. Braid, W. M. Bonner, Jr., M.D., G. R. Hennigar, M.D., W. H. Lee, Jr., M.D. (Charleston) Surg Gynec Obstet 125:485 (Sept.) 1967.

Using chemical, radioautographic, histologic, immunologic and metabolic techniques, an extensive analysis was made of 19 homograft "pairs", consisting of a viable and a nonviable (merthiolate-killed) graft from the same donor, removed from human volunteers after periods of implantation ranging from 3 to 8 years. The results show a progressive decline in graft integrity in both the viable and nonviable grafts. The destruction of the nonviable grafts was found to be more rapid and extensive than that of the viable grafts, which, even after eight years of implantation, had the macroscopic appearance of fresh cartilage and in all cases exhibited some cellular viability. No antigen-antibody reaction could be demonstrated in the serum of the hosts nor by fluorescein staining of the graft material. A marked loss of polysaccharide from the ground substance of the nonviable grafts was obvious, and there were also indications of a slight polysaccharide loss from the viable grafts. A measureable anaerobic glycolysis was demonstrated in both grafts. The metabolism of the nonviable grafts was attributed to host tissue fluids or fibrous tissue invasion, or both.

These studies have shown that the presence of viable cells in cartilage homografts contributes significantly to the prolonged survival of the graft. However, the results also show that cellular viability declined progressively, and at a faster rate than that of the normal aging process of human cartilage. It is concluded that eventually all cells will die, resulting in total destruction of the grafts.

SENILE DEMENTIA

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This report is based on the seemingly successful use of continuous anticoagulant therapy to prevent the progression of senile dementia. Seventeen patients in various stages of the disease have been treated over the past five years. None had progression of symptoms while treatment was in progress, and detailed histories will be given in a later article. While the series is small, the beneficial results and the fact that the theory of the treatment is based on known pathological findings and sound physiological knowledge seems to warrant a report at this time: It will give others the opportunity to confirm or deny the usefulness of this form of therapy in a disease which has now reached almost epidemic proportions and has hitherto been beyond our influence.

This study also includes presenile dementia, Pick's disease and arteriosclerotic brain disease. A review of the literature leads the author to believe that the clinical and pathological differentiation of these entities is often vague and unsatisfactory and the impression gained was that eventually they all will be found to be variants of the same condition: arterial insufficiency of the brain. Grouping these conditions is convenient for the purposes of diagnosis and treatment, for we will not have to haggle over minute and controversial differences in the classification of the patients. Even more important, we can consider them all to be potential candidates for treatment. Solely for the purposes of this study, then, the term "senile dementia" can be construed as including all those conditions listed above.

The prognosis for senile dementia as related in the textbooks[1,2] is very gloomy indeed. The condition of some patients remains relatively stationary but most patients deteriorate mentally and physically at varying rates and die within one to ten years. Supportive care is about the only treatment recommended. My own experience in twenty years of medical practice confirms this rather hopeless outlook. I had not only the opportunity but also the grim necessity of following the course of such patients from the onset of their initial symptom to their reaching the eventual "vegetable" state: incontinent, imbecilic and bedridden.

It was the repeated, hopeless, helpless watching of such patients that produced the present concept of treatment; at the same time I had patients with transient ischemic attacks responding satisfactorily to anticoagulant therapy as proposed by Millikan.[3] The thought was: why could not the mental changes of the dementias be the psychic equivalent of the motor paresis of the transient ischemic attacks? A bout of confusion could equal a weakened arm. In either situation the attack could and often did leave a major and permanent disability. Why not test this theory by a therapeutic trial?

Testing the Theory

A patient was needed whose prognosis without treatment would be hopeless; a sixty-six-year-old patient presented—her diagnosis was presenile dementia. Cortical atrophy had been demonstrated by air encephalogram. Two physicians had agreed that confinement in a mental hospital would soon be required, and with good reason: the patient could not carry on a conversation, could not dress herself and more recently could not use the bathroom unassisted and was at times incontinent. The daughter, a nurse, realized the crossroads had been reached. If her mother became worse, she could no longer

be cared for at home but would have to be "put away." Rather than this she chose a trial of anticoagulant therapy, fully understanding the risks. The patient was started on Dicumarol* as an outpatient. The modest goal, as explained to the relatives (the patient being unable to comprehend fully) was to prevent further deterioration. Surprisingly, the patient began to improve. In two months she was doing excellent needlepoint work, staying at her own home by herself much of the time and even doing her own redecorating. Personal hygiene was no problem. Nineteen months later, while still on anticoagulant, she had severe chest pain while at her own home and died twenty-four hours later in the hospital. An electrocardiogram suggested a myocardial infarction, but no autopsy was done.

The arrest of senile dementia progress in this patient seemed to confirm the original theory, with an added bonus; not only did the patient not deteriorate, she actually improved. While coincidence or the psychic influence of a change of treatment is a possible explanation, it is highly unlikely, since three independent doctors agreed on the poor prognosis and the encephalogram confirmed the diagnosis of organic brain disease.

Of the other sixteen patients, most stayed the same, some improved, but *none* deteriorated while under therapy. The group included varied categories: spontaneous bouts of confusion; repeated strokes leaving new motor deficits each time plus psychic changes; and persisting delirium, precipated by severe medical illness or surgery; all of which responded surprisingly well to three weeks of anticoagulant therapy. The distinct clinical impression was that the disease process was halted in all these patients. In a few in whom the deteriorating process had appeared to be stationary when the patient was first seen, treatment was undertaken with the faint hope that improvement in the existing disability would occur. When there was no improvement after three to four weeks the anticoagulant was discontinued. It is likely of very great significance that several patients who had been deteriorating rapidly prior to treatment did well while on the anticoagulant but deteriorated severely, even to the point of death, soon after the medication was discontinued.

Discussion

We long have known that 80 percent of strokes are caused by a thrombosis in the arteries leading to the brain—either intracranially or in the vertebral-carotid artery system in the neck. We know, too, that mental changes can occur with the first stroke even though they are more frequent with subsequent strokes. More recently several authors have shown that mental changes *alone* can accompany thrombosis in the carotid and or vertebral arteries.[4,5,6] We are then perhaps justified in tentatively assuming that thrombosis in an artery leading to the brain can cause damage to the brain tissue of sufficient degree to produce symptoms, and that these symptoms will fit at some point in the following scale:

Motor defect only (Paresis)
Motor and Mental Defect
Mental defect only

Between the extremes of mental or motor defect only are varying combinations of motor and mental deficiencies.

We can assume that the location and extent of this brain damage will depend upon the site of the thrombosis and the efficiency of the collateral blood supply to the area. But even with the same site and degree of brain damage, the loss of brain functions will not be the same in each patient, as demonstrated by Goldstein.[7] If we do not remember this fact we can be misled by the apparent lack of correlation between the clinical symptoms and the pathological site of the lesion. In this regard we also must allow for the difference in psychological reaction of the

individual patient to his brain damage as discussed by Brosin.[8] In short, similar pathological lesions in the brain can result in different symptoms in different patients.

But, it is said, patients with senile dementia *always* show certain characteristic microscopic findings in the brain and they *do not always* present evidence of arterial thrombosis. I will agree to the former but must add that pathologists find much overlapping of the categories, and sometimes a poor correlation between the clinical and the pathological severity.[1] As for the absence of thrombosis, let me ask the reader: How many times have you seen the carotid and vertebral arteries examined during an autopsy on a patient with senile dementia? The author has seen many brains examined but never once has seen a complete study of the vertebral and carotid arteries. Certainly this examination is difficult to perform, but can we come to any rational and justifiable conclusions about the relationship of the circulation to the pathological changes in the brain until we have done such complete studies on many patients? We must also consider the collateral circulation and even the condition of the end-arteries. Such comprehensive arterial studies were recommended in America by Hunt[9] as long ago as 1914, and in Europe by Chiari in 1905. Complete arterial studies seem to have been neglected as far as senile dementia is concerned. Most discussion centers around the microscopic and gross abnormalities of the brain itself. In fact, at most formal brain cutting seminars, the rest of the body has long since departed to the grave. It is as if we classified gangrene of the leg according to whether it started in the little or the great toe, and neglected to examine the femoral or iliac arteries. In addition to the admittedly difficult technical problems, some psychological block has prevented us from applying to the study of the brain the same logic we have so successfully used in solving the circulatory problems of the extremities. Perhaps we should conceive of the brain as a fifth extremity.

It must be admitted, though not in connection with senile dementia, that of recent times the neck arteries have been more thoroughly studied. The classic is the monograph of Hultquist[10] who dissected the extracranial and intracranial arteries in 3,500 patients and discovered a surprising amount of arterial obstruction. Unfortunately there was little accompanying clinical history. Fisher[11] added the important clinical information in his own studies and thoroughly reviewed the subject of extracranial artery obstruction. Humphrey and Newton[12] found carotid occlusions in seventeen patients under the age of forty—two under nineteen years of age—so we must not think of this as just a geriatric problem. The study of Hutchinson and Yates[5] of the caroticovertebral system in eighty-three patients, along with their histories, reveals the first symptoms of arterial obstruction sometimes to be psychological. Also there are specific case reports on mental deterioration associated with carotid artery occlusion.[4,6,13] Clark and Harrison[14] reviewed sixty-nine cases of bilateral carotid artery occlusion and found that 29 percent had mental symptoms.

This all adds up to the following observations: senile dementia can occur with carotid and/or vertebral artery disease; it can occur without it and with intracranial artery disease only; and it can occur with both combined. But as far as is known, no one has proved that it can occur without any arterial disease. Such proof would require that the arterial supply be examined from the aortic arch to the end-artery areas, including the intraosseous portions of the arteries, which have been shown to be occluded at times. We still do not have sufficient evidence to prove beyond all doubt that the arterial narrowing is a cause of and not just an accompaniment of dementia; but we must

consider, as Kety[15] has well emphasized, that the brain, above all organs, requires efficient circulation. A general diminution of the blood supply could cause generalized brain damage and if the area that concerned the patient's memory of his telephone number happened to be involved, he would notice it. But who would notice the destruction of 10 percent of the nerve cells supplying the erector spinae muscles? In other words, compared to the motor areas, the mental apparatus of the brain may be a very sensitive indicator of brain damage. I say "may be," because even here there can be a loss of function which is not easily noticeable or measurable since it may be compensated for by the patient with devices such as the Korsokoff mechanism.

We have other evidence of the relationship of dementia to vascular disease but it has not been systematically correlated. In 1956 Ask-Upmark and Fajers[16] reported microgyria associated with left common carotid artery obstruction in a patient with pulseless disease. They mention a possible relationship to Alzheimer's and Pick's diseases. Of great interest also is the paper by Fetterman and Moran[17] relating cerebral softening to anomalies of the circle of Willis. They found that 50 percent of their patients had "normal" circles and 23 percent had complete interruptions. Such abnormalities sometimes were felt to be a deciding factor in producing cerebral softening in some patients, and could explain such a lesion in the presence of only minor arterial narrowing elsewhere in the system supplying the brain.

Modern Facts About Strokes

It is perhaps advantageous to consider some of the modern knowledge about strokes as outlined by Boyd.[18] Eighty-five percent result from the coagulation of blood (80 percent thrombosis, 5 percent embolus). It is commoner for the occlusion to be extracranial than intracranial and Boyd says we should think of strokes as being cerebral infarctions rather than cerebral thromboses. He mentions the fact that senile dementia may be associated with carotid artery occlusion. He notes also that 50 percent of the people over fifty years of age have severe atherosclerosis of the extracerebral or extracranial arteries. Besides the large vessel lesions he also stresses the possibility of microemboli as being a cause of "little strokes."

Therapeutic Factors

Let us now turn to two therapeutic facts: First, anticoagulant drugs *do* reduce the clotting of blood effectively and *do* prevent intravascular thrombosis.[19] Secondly, anticoagulants already have been proved to be of value in maintaining the cerebral circulation, as demonstrated by Millikan[3] and McDevitt and Wright.[20]

Now if the theory is correct, that the thrombosis in the arteries to the brain is the cause of senile dementia, what result should we anticipate from anticoagulant treatment? We should have a right to expect complete arrest of further deterioration because the drug will have its effect in all the arteries, whether carotid, vertebral, anastamotic or end-artery. We might allow ourselves a 5 or 10 percent failure rate due to other factors such as a failure of the general circulation, anomaly of an artery or failure of the anticoagulant to be perfectly effective in all arteries in all patients at all times. It should therefore be relatively easy to test the theory by observing whether or not the dementia increases in the patients while under treatment. In my series of patients not one deteriorated to any significant degree, and many were treated over a year.

We now have come to a great stumbling block—how do we know tha these patients would have deteriorated without treatment? We can never know for sure, but we must give some credence to clinical judgment. In the example given earlier, three experienced clinicians felt sure the

patient was failing rapidly. With the clinical experience of observing the course of similar patients, along with watching the progress of a particular patient, a physician can make a fairly accurate assessment of the outcome: some patients will fail rapidly and others slowly. Senile dementia early in life (presenile dementia) is usually more rapid in its course and hence gives a more clear-cut response to treatment. Some predictions are going to be wrong, but if we take a group of such patients we can be reasonably certain that not *all* of them are going to remain stationary. When none of the patients in my group demonstrated deterioration, this was felt to be highly significant. And when some even improved, and maintained this improvement while under therapy, the result seemed even more impressive. Finally, it seems important to note that several patients who did well while taking anticoagulant deteriorated rapidly and died a few months after this was discontinued. One, whose initial symptoms were purely psychic, had repeated strokes with resulting hemiplegia after the medication was discontinued.

Claude Bernard[21] recommended the method of counter-proof to test one's theory and it was possible to do this on one patient. This man had presenile dementia, proved before treatment by air studies and clinical examination, and after death by autopsy. We took this patient off Dicumarol three times over a period of two months. Each time, as soon as his prothrombin time had risen above the therapeutic range for three or four days, he became confused, combative and required a constant attendant. Each time, on resumption of Dicumarol, and a few days after his prothrombin time dropped to the therapeutic range, his mental status improved and he required only regular ward care. Following discharge he had a bleeding episode, the anticoagulant was stopped, and he deteriorated rapidly, became bedridden and died of pneumonia two months after discharge. Once again this result strongly supports but does not prove the theory, for it is only one case.

Blood Sludging

A very significant point is the occurrence of *improvement* in some patients—as in the first patient described. This was not predicted from the theories and facts already discussed, for it has long been held that brain damage is irreversible. Therefore, we must look for an explanation of this phenomenon. On a circulatory basis the work of Knisely[22] on blood sludging could offer a valid explanation. The sludged blood in the narrowed vessels is less fluid and hence does not flow freely. The anticoagulant, by reducing sludging and thickening of the blood, could increase the efficiency of the blood flow, thus returning function to brain cells which are not dead but are not functioning at full capacity due to impairment of the supply of the nutrient and the removal of waste products.

We might well wonder if sludging of the blood has any real effect on the supply of blood to the brain. Have we any evidence that the blood flow is reduced? Experimental work by Swank et al.[23] showed that aggregation of blood cells produced by injecting serotonin resulted in an increased screen filtration pressure (SFP), that is, the pressure needed to force the blood at a uniform speed through a multipore screen. This work also showed that perfusion of blood with an elevated SFP through an isolated cat head resulted in early cessation of brain waves. They have shown repeatedly that blood with an elevated SFP manifests significantly increased resistance to blood flow through an isolated or intact organ. If we can transpose these findings to patients, which seems reasonable, we would expect to find a slowing of the circulation through the brain in any of the many general conditions which cause sludging of the blood.

This could result in confusion, delirium and even unconsciousness. If the patient had pre-existing carotid or vertebral artery stenosis, or even a localized intracranial arterial narrowing, it would not be unreasonable to expect even more severe effects on the circulation beyond the point of arterial constriction. We may then postulate from the above reasoning that an elderly person, already having a tendency to confusion due to narrowing of the arteries to the brain, upon suffering pneumonia, severe trauma or other disease causing sludging of the blood, would likely become quite confused because of the increased arterial insufficiency of the brain. Of course, besides the sludging we also would have to attribute some of the effects to hypotension and decreased cardiac output, all three of which might combine their effects to result in a severely reduced flow of blood through the brain. Such situations often are found clinically.

An important question seems to be: Will the anticoagulant Dicumarol prevent blood sludging? Swank et al.[23] also showed that the aggregation of blood cells produced by serotin can be abolished by the serotin antagonist UML-491. They found that several other methods prevent aggregation—such as sodium citrate when present to prevent coagulation of the blood. So it does not seem unreasonable to expect that other anticoagulants—those nontoxic to humans—might have the same effect. But I can find little reference to experiments to demonstrate this. Bronofsky and Quick[24] found that Dicumarol did reduce the platelet adhesiveness, more so than did heparin. Knisely[25] found that a heparinized monkey did not show the expected clinical picture of brain dysfunction when exposed to the usual sludge-producing stimulus. We do know that Dicumarol does prevent blood clotting, which is likely the end and irreversible stage of cell aggregation, so we might be justified in inferring that the Dicumarol acted at the initial stage in blood clotting by preventing the original sludging of the cells. The most direct evidence of the correctness of such an inference seems to be the study of Meyer,[26] who directly observed on the pial vessels the action of Dicumarol and heparin in preventing clumping of cells and slowing of blood flow.

It seems important that more evidence be obtained to substantiate the possible function of Dicumarol in preventing this aggregation of blood cells. First, because more and more evidence is accumulating that blood sludging is a source of widespread tissue damage. Its prevention could circumvent crippling organ injuries and even prevent death in many patients. Secondly, Dicumarol is a relatively nontoxic drug which has been, and still is, used by millions of patients. If we can prove its action in desludging blood, its use can be extended to many more patients. Such benefits could be incalculable, especially to older people who may have developed arterial narrowing. This would apply even more especially to maintaining the circulation to all parts of the brain in such people. For the brain, unlike most organs such as the heart, kidney and liver, cannot afford to have small, even microscopic, areas of necrosis. It might if the area were a motor area, when the only bad result would be a slight weakening of muscle strength. But when this damage occurs in areas concerning memory, thinking processes or coordination, the results can be disastrous.

Psychological Effects

Once again we must consider another possible explanation for improvement in patients started on Dicumarol: the beneficial psychological effect of a new treatment, a new doctor, new surroundings and other such factors. In the two cases here described the psychological factors did not appear to be of much importance due to

the type and degree of the mental failure, but they should not be ignored. In some patients we can expect that the psychological reaction to brain damage will be more important than the tissue damage itself and for such people psychotherapy may be the best form of treatment. But this is a subject too large to be considered further in this study.

Implications of Successful Anticoagulant Therapy

Two questions remain to be answered: First, are these results reproducible by others? Only further clinical trials will answer this question. The assessment of the results of such trials poses many problems, as has been pointed out recently in the discussion of research design by Whitman.[27] The main sources of difficulty seem to be the many variable factors involved, the difficulty or impossibility of securing comparable control cases and the pitfalls of statistics. But one result should be relatively easy to assess: if a significant number of patients deteriorate while under adequate anticoagulant therapy then the theory likely is wrong.

The second question is more difficult and intriguing. If the theory is correct and we can treat patients successfully *before* serious brain damage occurs, does this mean that we can eliminate senile dementia? That is, will it recede to the group of conquered diseases such as poliomyelitis, diphtheria, typhoid fever and smallpox? And if so, will the price be too great? For there are certain to be some deaths from the complications of anticoagulant therapy and we shall unavoidably find ourselves treating a certain percentage of patients who would do just as well without treatment.

When and Whom to Treat

Many patients will be so sick there should be little difficulty in favoring a trial course of therapy. With others the decision to undertake treatment will be difficult. Should the doctor alone make the decision? I think not. Rather than impose his own particular philosophy upon the patient it would seem better to discuss the pros and cons with the patient and his relatives. The doctor certainly must be free to express his own opinion, but he would be wise to remember that the patient may prefer to risk his life rather than to lose his mind. If the patient's philosophy is—"let us live while we live," and the doctor's is "life at all costs," then who is to decide? The situation is analagous to that encountered in deciding whether or not surgery should be performed for a condition which does not immediately threaten life: the patient must take part in the decision for or against the operation. There are differences: Anticoagulant treatment does not offer a quickly permanent cure of senile dementia, nor has its value as yet been proved. But it does offer some hope of relief of symptoms and of preventing a thrombosis which may lead to permanent crippling and even death. Conveniently, it can be begun on a trial basis, to be stopped whenever desired. The best plan would seem to be a joint decision by the patient (or his representative) and the doctor after a full discussion of the potential risks and advantages of treatment. The advantages will vary with the stage and type of the patient's disease; the risks with the skill and caution with which the treatment is carried out by the patient and his doctor.

Two examples may clarify some of the problems involved in choosing patients for treatment. In the case of the sixty-six-year-old woman mentioned earlier, there was no doubt that she should have a trial of therapy; considering her prognosis untreated, she had little to lose. The relatives, however, were at first fearful of the idea—

they felt guilty of being an accomplice in her death if their mother succumbed to a hemorrhage resulting from the treatment. As it turned out, the improvement was so gratifying that there never was any thought of discontinuing therapy throughout the year and a half before her death. A more recent patient illustrates the opposite problem. A sixty-five-year-old man had two strokes which left him with some speech and emotional difficulty. He was referred for possible anticoagulant therapy. He was extremely talkative, emotionally labile and agitated but had been depressed up until two months prior to my seeing him. He and his wife were fearful of another stroke, although it was a year since his last one. Anticoagulant therapy was discussed with them and they were agreeable; such was their fear of a third stroke. After several interviews, however, it was realized that most of his problems were emotional. Many deep conflicts were revealed which interlocked with the personalities of both the husband and wife to produce severe anxieties in both of them. With psychotherapy, often with both the patient and his wife together, considerable improvement occurred. The patient slept better, his talkativeness and restlessness subsided and the family situation became more tolerable. With subsidence of his irritability he was much more easily handled at our clinic. They still desired anticoagulant therapy but accepted my judgment that at present the danger of another stroke did not warrant the risks involved. This was especially true as the patient's blood pressure sometimes goes to 200/110.

Conslusions

If senile dementia really is due to thrombosis in arteries leading to the brain, and if anticoagulants do prevent blood from clotting, then it should follow that long term anticoagulant therapy should prevent senile dementia from progressing. Hence it seems justifiable to give this form of therapy a trial. Even if the theory holds true only for some of the cases, salvage of these patients may be worth the effort and risk of giving a larger number a trial of therapy. Exact premortem diagnosis is difficult, trial therapy is relatively simple and need not be specific in this situation any more than in the rest of medicine where empirical treatments are frequently effective.

The choice of anticoagulant may be important. I chose Dicumarol because I was familiar with its use. It may have a more effective action for senile dementia than other anticoagulants: it is apparently more effective than heparin in preventing platelet agglutination, according to the research of Baronofsky and Quick.[24] Blood clotting is such a complicated mechanism that it would not be surprising to find different actions by different anticoagulant drugs. These have not as yet been fully differentiated.

Summary

The long term use of Dicumarol to halt the progress of senile dementia is described and the apparent reasons for the success of this treatment are discussed. It is postulated that senile dementia, and likely Alzheimer's and Pick's diseases too, result from brain damage caused by arterial insufficiency. This, in turn, is considered to be a consequence of sludging or clotting of the blood in previously narrowed arteries leading to the brain. The site of the lesions may be extracranially in the caroticovertebral system, intracranially in the smaller arteries, or both combined. Some details of the histories of two patients from a series of seventeen are given to illustrate the concept that by using long term Dicumarol therapy, further blocking of the arteries can be prevented, the arterial insufficiency of the brain can be held stationary and hence the progress of the senile dementia can

be stopped. The choice of suitable candidates for therapy is briefly outlined. It is suggested that if further research confirms the correctness of this etiological hypothesis and the effectiveness of the Dicumarol therapy, these dementias may join the list of controllable diseases.

Acknowledgment

I wish to thank the many members of the staff of Western Psychiatric Institute and Clinic for their advice in this research project.

References may be obtained upon request to the Editor, the Journal of the South Carolina Medical Association, 80 Barre Street, Charleston, S. C.

Reprinted by permission of the author and the Pennsylvania Medical Journal. Dr. Walsh is clinical assistant professor of psychiatry at the University of Pittsburgh.

Carcinoma of the Esophagus—Parker, Edward F. and Gregorie, H. B., Jr. Curr Prob Surg (April) 1967.

A review of our experience in the treatment of a total of 47 cases seen between 1940 and July 1962 now is presented. This includes a review of the history of carcinoma of the esophagus, its incidence and epidemiology in various parts of the world, the theories on etiology, and its distribution according to age, sex, race, and site. The pathologic process is described, along with symptoms and signs, including the reasons for their absence at times. In discussing diagnosis, it is stressed that esophagoscopy is practically always indicated in patients having dysphagia, in addition to the contrast radiographic studies of the esophagus commonly called a barium swallow, even if the barium swallow is normal. We have seen cases with normal x-ray films but with an abnormal esophagoscopic examination with proof of the presence of malignant tumor not large enough to show by x-ray.

In presenting the methods of treatment used and their results, there are contrasted a series of 170 cases seen between 1940 and 1951, a second series of 166 cases seen between 1951 and 1957, and a later series consisting of 135 cases seen between 1957 and 1962. In the initial series, the emphasis was primarily upon surgical excision in all patients who might be operable. The results were poor and the long-term survivals were few. In the second series, the emphasis in treatment was difinitely upon radiation as the primary treatment in all. The results were improved but still left a great deal to be desired. In the later series, the emphasis in treatment was upon combined radiation and excisional treatment, the radiation therapy preceding the surgical. The results in this last group were distinctly preferable to the earlier series. Over the years the operability rate has been lowered but the resectability rate has been correspondingly improved along with a distinct fall in the mortality rate. In the last series, there was attained a 9% survival rate for two years or more. Although many cases of carcinoma of the esophagus are so far advanced that they are not amenable to the optimal therapy, there was attained among the operable and the resectable cases after a course of preliminary x-ray therapy a five year survival rate of 5 of 21 cases, or approximately 25%.

As a result of the experience with 471 cases, it is believed that the rationale for primary radiation followed by resection in all patients who remain operable has been demonstrated as a method giving distinctly improved results over the use of either method alone.

Pathological Association of Right Ureter and Right Ovarian Vein—Fletcher C. Derrick (Charleston) J Urol 97:633-640 (April) 1967.

Pyelonephritis associated with pregnancy is not rare. It occurs on the right side more often than by coincidence. Many theories have been advanced as to why this occurrence is true. Several cases are reported which represent right side pyelonephritis and a pathological association of the right ovarian vein and right ureter. Apparently there are aberrant entrances of the right ovarian vein into the vena cava. If the vein does not undergo complete involution after delivery or if there is thrombosis in the vein, obstruction to the right ureter may develop with varying degrees of obstruction and accompanying symtoms. In some cases findings have been association of the right ureter and ovarian vein much like a "vine and tree". Removal of the vein has proved curative in all cases.

Diagnostic criteria are cited. Vein embryology is reviewed and theories of development of pathological association are advanced.

ERRATUM

In the paper by Drs. Charles B. Hanna, Walter D. Hastings Jr. and D. C. Alford entitled "Carcinoma of the Pancreas. Survival Without Resection" published last month, an error appeared on page 9 in the first paragraph. The line "Her icterus index was 11.7 Gm . . ." should read "Her icterus index was 11.7 mm . . .".

X-RAY FILM OF THE MONTH

PETER HAIRSTON, M.D.
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The chest films illustrated are those of a 55-year-old white female admitted to the Medical College Hospital for evaluation. Annual chest x-ray films had prior to this time been interpreted as normal. The patient had been under the care of her local physician because of a symptom complex consisting of drooping of the eyelids, loss of voice and generalized muscular weakness. A satisfactory symptomatic response to the administration of cholinergic drugs had been obtained.

This is a case of the myasthenic syndrome or myasthenia gravis with an associated tumor of the thymus (thymoma). Myasthenia gravis is a disease characterized by progressive fatigability of the muscles due to impairment of conduction at the myoneural junction. In a high percentage of cases this syndrome is associated with a tumor or hyperplasia of the thymus gland. The latter is more common and refers not to an increase in size or weight, but rather to a microscopic abnormality, i.e., lymphoid hyperplasia of the medulla in the form of germinal center proliferation.[1] The mechanism of the association is poorly understood; however, the statistical evidence that it exists is of sufficient strength to lead most surgeons to advocate removal of the thymus glands in patients with myasthenia gravis. A review of a large series of myasthenia patients indicates that the individual who most frequently benefits from thymectomy is the young female under 30 years of age who does not have a thymoma.

Thymomas may arise both from the epithelial and lymphocytic elements of the thymus gland. No consistent histologic features separate the thymomas that are associated with myasthenia gravis from those that are not. About 25% of thymomas are locally invasive but in those patients with myasthenia gravis, seldom is this process directly the cause of death.[2]

Thymomas are the most common of the anterior mediastinal tumors and usually occur at the junction of the heart and great vessels as shown above. They may intrude into either lung field, and at times may contain linear calcifications. The teratoma is the tumor with which they are most likely to be confused. Obviously, in the patient with myasthenia gravis the most minimal abnormality in the anterior mediastinum is usually regarded as a thymoma. PA, lateral and oblique views of the chest, fluoroscopy, occasionally laminography and above all a radiologist in-

formed of the problem are usually sufficient to discover the presence of a thymic tumor.

The patient presented underwent removal of the thymoma with no significant operative complications, but she had no improvement in her myasthenia gravis symptoms.

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A Field Trial of Amantadine Prophylaxis in Naturally-Occurring Acute Respiratory Illness—John F. Finklea, Albert V. Hennessy, and Fred M. Davenport. Amer J Epidem 85:403-412 (May) 1967.

A field trial of oral amantadine prophylaxis in naturally occurring acute respiratory illness was conducted among mentally retarded but educable children during the winter and spring of 1965. For the four months of the trial amantadine was well tolerated at a dose of 1.0-2.5 mg per Kg per day and over 97 per cent of the prescribed doses were ingested.

Amantadine and placebo groups did not differ significantly either in streptococcal illness during the trial or in any illness category during a three-week pretrial observation.

However, the amantadine group experienced significantly less respiratory illness during the trial than did the placebo group. Part of this difference is attributed to the successful chemoprophylaxis of influenza A_2. The remainder was accounted for by a decrease in upper respiratory illnesses that have not yet been etiologically identified. These upper-resipartory illnesses occurred in a single wave involving five of the sixteen housing units.

Laser Versus Exenon Photocoagulation—William W. Vallotton, M.D. and Bartley E. Antine, M.D. (Charleston) South M J 60:819-822 (August) 1967.

The authors compare the two major photocoagulating instruments in respect to the following factors: basic instrument, experience of operator, ease of viewing, preparation of patient, safety factors, versatility, clinical appearance of lesion, histological appearance of lesion, and complications. The authors describe their experience with the Laser photocoagulator in treating 69 eyes over an eighteen-month period.

They conclude that in their experience, laser photocoagulation offers decided and valuable advantages in the realm of ease of operation and patient/operator convenience and comfort. It appears to be as effective as the Xenon photocoagulator in this production of satisfactory chorioretinal adhesions. Because of evidence which tends to suggest less vitreous heating, less retinal edema and earlier pigmentation and scarring, they believe its use is preferred in the treatment of chorioretinitis, retinal holes and in the postoperative augmentation of diathermy. The ineffectiveness of the laser photocoagulator in the realm of anterior segment, and vascular disease is not considered to be a significant disadvantage in view of the marked limitations of the Xenon instrument in these same disease categories.

Development of Hypertension: The Framingham Study—W. B. Kannel et al (123 Lincoln St, Framingham, Mass) Ann Intern Med 67:48-59 (July) 1967.

The relation of existing blood pressure and subsequent development of hypertension to antecedent measures of adiposity was investigated in 5,127 adult men and women being followed biennially for the development of atherosclerotic and hypertensive vascular disease in the Framingham Study since 1949. Relative body weight, weight change under observation, and skinfold thickness was found to be distinctly related to existing blood pressure level and to the subsequent rate of development of hypertension. The risk of hypertension in previously normotensive individuals was proportional to the degree of over-weight however assessed. The possibility of a substantial artifact in indirect blood pressure determination in subjects with fat arms was excluded by a nexamination of the relation of adiposity to blood pressure as obtained in the relatively lean forearm as well as the upper arm. Within the range of arm girths in this population, no effect of arm girth on blood pressure independent of the associated degree of adiposity could be demonstrated. Whether or not the rise in blood pressure observed to occur with increase in body build is directly due to the accumulation of adipose tissue remains unanswered. The finding that lean hypertensives had an increased tendency to develop obesity as well as the converse, and that already obese normotensive subjects developed hypertension only after some time lag, suggests a relationship which is neither simple nor direct. It seems reasonable to conclude that adiposity predisposes and makes a significant contribution to development of hypertension in adult men and women beyond age 30.



President's Pages

The admissions committee at the medical college has trouble maintaining high standards of the medical profession. The ability and integrity of this committee is medicine's principal bulwark in maintaining the world-renowned excellence of the American medical profession. Habitually accept, attempt to educate, and pass on into the profession unqualified students and the quality of medical care will deteriorate. The public will be the ultimate sufferers.

So often someone says this or that excellently qualified student could not get into medical school. There are many possible reasons about which the public is unaware, reasons which the admissions committee must keep silent.

A student may apply with excellently written recommendations. Subsequent direct conversation between a member of the committee and the author of the recommendation has more than once directly contradicted the author's written word. Sometimes the applicant is found by the committee to be what his recommendations do not show—a person with a number of law violations in his record, an early alcoholic, a psychiatric case, a known early drug addict, etc. Then too various aptitude tests and personal interviews may be at least partly determining. When various disqualifying facts exist the committee could hardly reveal them if it wished to do so. I have personally recommended more than one person the committee did not see fit to accept and I wondered why, sometimes very skeptically. Since Ihave studied the matter a bit I understand.

Does the committee accept out-of-state applicants to the exclusion of instate applicants? The answer is yes—sometimes. It is the custom of all medical schools except one (the Medical College of Georgia) to have a very few out-of-state men to compare the work of other undergraduate colleges in preparing students for medical school with the work of our own colleges. Remember too South Carolina students who have been accepted by other colleges. In 1965-66 twentyone South Carolina students entered medical colleges in other states.

Does our college turn down qualified applicants? In the 1965-66 class our college turned down 120 applicants. Only two of these were accepted by any other medical college. Of those accepted by our college about 10% came with an "A" average, 73% with a "B" average, and about 16% with a 'C' average.

It would almost seem a "crime against the state" for the committee to admit to medical school students who would almost surely fail. Each student costs the state tens of thousands of dollars a year (look at the school's budget and divide into it the number of students). When a student fails he has not only cost the state useless expense but he has occupied a place that may have been successfully filled by some other aspiring student.

The biggest trouble really is securing enough qualified applicants. The 1965-66 class had 389 applications of which 203 were from South Carolina. Eighty two were accepted as qualified. The University of Virginia had870 applicants for 112 places; the University of Florida had 713 for 59 places; the University of North Carolina 676 for 70; and the University of Mississippi 750 for 85 places, etc.

On the average each applicant applied at about 5 different colleges. A college seeming to have 500 applicants would in reality, when averaged out, have about a hundred. So obviously there is a shortage of applicants—and it is getting worse. With a masters degree a man can go right into the business world and make ten thousand dollars or more a year. It would be ten to fifteen years (medical school, internship, residency, etc.) before a student entering medical college could hope to equal that. Constant derogatory propaganda by some politicians and the "liberal" press further decimates the number of men who might otherwise enter what used to be a universally praised and appreciated profession.

When one of our student-friends shows an interest in the medical profession we should praise his aim but not advise him as to courses of study. He should consult the medical school of his future choice. So often a student applies with excellent grades, with an A.B. or other degree, but without having studied certain necessary subjects. Medical school curricula change so fast only an expert, such as a member of the admissions committee, should advise a student.

Opinion to the contrary notwithstanding a student need not resort to attempted political pressure on the committee. It is useless.

My hat is off to the committee on admissions. It is not perfect but aspires to perfection. May the sun shine brightly on its efforts.

Norman O. Eaddy, M.D.

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50 YEARS AGO

The Journal of the South Carolina Medical Association

March 1918

Further announcement of the coming Aiken meeting was made. Hotels were said to offer rooms at rates from $2.50 to $5.00 Dr. Kenneth M. Lynch was to speak at the meeting.

The needs of the Army medical service were emphasized.

Editorials

Cost of Medical Quackery

South Carolina has always had its share of active medical quackery. It continues to indulge itself in this dubious discipline and unless human nature changes and proper education is accomplished, it will probably continue to suffer the same attack on its intelligence and its pocketbook.

Back in the very early days of the colony persuasive itinerants foisted on the gullible a number of "sure cures." Among them was the rattlesnake stone, which was a sure-fire remedy for the bite of the venomous reptile. Cancer cures were advertised freely several centuries ago. One quack advertised a plaster for "women's hysteric vapors", which might still have a place, if only it worked. Some of the cure-all pills advertised in our newspapers in the early part of the 18th century are still in use, for example, Anderson's Scot's Pill. One vendor of the remedies said he had a pill capable of "eradicating every disorder incident to the human body"—and no doubt he sold a many a bottle to the gullible colonials.

The claims nowadays are a little less flagrant; the medicine man and his show have pretty much gone, but the public is deluded by high-sounding names of "clinics" or pseudo-impressive multisyllablic names of remedies which are spread all over the television screen and all of the various media that thrive on advertising fees. Perhaps the claims are now somewhat less absurd; legal prohibitions have done something to hold them down. The better class of newspapers and magazines refuse advertising which contains unsupported and radical claims for unrecognized remedies. Even so misleading articles and advertising slip in fairly often. The less reputable the publication the more likely is it to carry false and actually dangerous advertising claims.

There have always been bits of apparatus said to perform miracles for those who believe in miracles. The public was offered such marvellous machines as the Abrams box of some years ago, the Diapulse machine, which despite prohibition by law still manages to operate in some areas, vibrators, pads, reducing machines, super vitamins, cereals that contain all known nutrients in sufficient quantity to sustain the most voracious body.

Some regulation of advertising and reform in labelling is now effective, so that extravagant claims cannot be attached publicly to worthless products. However, the cancer cures continue to come. Krebiozen went through a period in which many uninformed people thought that the promoters were being wrongly persecuted; a recent blossoming cancer cure in Ohio was promptly surpressed on valid evidence of its inefficacy. Nevertheless, in California, the paradise for cults and quacks, there is a large organization which does all it can to uphold the several recent so-called cures for cancer which have been proven as utterly useless. It holds conferences, publishes a journal, insists that the discredited remedies are valuable, and does all it can to promote them to the public.

Somebody estimated that our national bill for quack remedies comes to over two billion dollars, and probably a greater total if we include all expenditures to satisfy a little wishful thinking generated by the eloquence of the hucksters. Patrons of the quacks have been classified by one rather cynical observer as 1) miracle seekers (perhaps to some extent sympathy seekers who no longer have the balm of the old general practioner available), 2) the strictly uninformed and uncritical element 3) the restless group that cannot stick with any one procedure and 4) the

strawgraspers. This last category represents many people with chronic disease for which there at present is no known remedy, but who rather naturally are willing to try anything that promises relief. And that is a rather human trait. Yet it is rather sad to see so much money and hope expended on useless treatment and false encouragement. Psychological counselling might be of much more value to many of these people.

"Restless from quack to quack they range,
When 'tis themselves they ought to change."

Cigarette Smoking and The Heart

What cigarette smoking does to the heart seems to be a question even less completely settled than what it does to the lungs. While some of those sincerely concerned with the possible harmful effects of cigarettes in causing or aggravating heart disease are prone to make dire predictions of the drastic effects of cigarettes on the circulatory system, there is relatively little scientific evidence to back up this well intentioned propaganda.

The much publicised report of the Surgeon General in 1964 concluded only that male cigarette smokers had higher morbidity and mortality than did their non-smoking counterparts, but no direct evidence of the effect of smoking on the heart was produced. This statement refers to the use of cigarettes only; the difference between smokers and non-smokers of pipes or cigars was negligible. Furthermore it was shown that apparently nicotine was not the potentially harmful factor and that those who inhaled and those who did not had very little difference in their pre-disposition to disease. The influence of other factors such as stress, diet, excessive cholesterol levels, elevated blood pressure etc. was noted but not clearly correlated, nor did there appear to be any specific constitutional differences in the two groups with different habits.

Since the time of the first report, many studies have followed, but there has been little change in the bare bones of fact developed by the first investigation. The studies have confirmed but not extended the earlier observation. A study of the relation of angina to smoking was ambivalent. Other studies seem to indicate that within wide range the number of cigarettes smoked was not significant in the likelihood to disease, nor was the duration of the smoking habit. Again the practice of inhaling could not be incriminated; actually in one study the group that did not inhale had higher tendency to disease than the other members. The people who gave up cigarettes did not appear to improve their chances of escaping coronary heart disease.

Only about half of the coronary heart disease deaths can be associated with cigarettes in any way. Perhaps this might be a fact to be acknowledged in the campaigns against cigarette smoking, in which exaggerated dangers may sometimes be overemphasized.

A recent critical commentary on the effect of smoking on coronary heart disease reaches this conclusion "It is, therefore, difficult to see from the new epidemiological data how valid causal inferences can be drawn that *cigarette smoking* is linked to coronary heart disease deaths or that the excess from coronary heart disease deaths is caused by cigarette smoking. We do not know whether or not there is a causal connection between cigarette smoking and increased deaths from coronary heart disease."

JAMA 203:193

LETTERS TO THE EDITOR

To The Editor

The ability of physicians to maintain life for very long periods in the unconscious patient raises the question as to how long such skills should be deployed. As physicians we are eager to promote the recovery of everyone who can do so. In order to deprive no one of his chances on

this score it is relevant to know the longest periods of coma which have been followed by useful survival.

A committee of the Massachusetts General Hospital is studying our own records and the world literature to determine pertinent features in all patients who, *despite coma for over 5 weeks*, have made a useful recovery. We think it is vital not to overlook any well documented patient in this category. We should be grateful if any reader of this journal would draw our attention to any case published under a title which is not indicative of survival after prolonged coma. We are also eager to receive accounts of such cases as yet unreported. A publication incorporating our own and others' data is planned.

William H. Sweet, M.D., D.Sc.
Chief, Neurosurgical Service
Chairman, Committee on Management
of the Unconscious Patient
Massachusetts General Hospital
Boston ,Massachusetts 02114 USA

Dear Doctor Waring,

In your editorial in our S. C. Med. Journal of Jan. 1968 there are references to Drs. John L. Dawson and to Dr. Robert Wilson of Charleston. Today many doctors who live in S. C. never knew these men, and so, I would like to take this opportunity to say that each one was well known to me. They were representatives of the highest type of doctors. Also each one was interested not only in the practice of medicine, but in the public health and especially in tuberculosis and in its prevention. In those days there was no drug treatment for that disease.

It was at Dr. Dawson's request that I began attending the tuberculosis clinic at the Shirras Dispensary on Society St., once a week. These people had or were suspected of having tuberculosis. That was long before the advent of Dr. William A. Smith.

At some time between 1910 and 1914 I became president of the Charleston Tuberculosis Association, which position I held for one or more years. It was composed of a small group of philanthropic Charleston ladies, who were interested in the prevention and cure of tuberculosis. Aside from the meetings we supplied milk and eggs to the patients known to us. Perhaps my outstanding accomplishment was the procurement of a registered Nurse, who came to us from Jacksonville, Fla. Her salary was $100.00 a month. This I paid for one month and later it was repaid to me.

On another occasion I arose and told our organization that in my opinion the Society was merely wasting its time and money by providing milk and eggs to patients, as that did not lessen the spread of pulmonary tuberculosis. Further, that we should attack the underlying causes and thus lessen its spread. I mentioned that overcrowding and the living thus of many families, especially Negroes, many of whom were cooks or nurses was a menace to the health of the Charleston citizens. I called to the attention of our society that prevention was far better than cure.

Inasmuch as many wealthy philanthropic people owned much cheap overcrowded property in Charleston, and some, I was told later, were members of our Society, this did not make me popular. But so it has been ever since or before the time of the Gracchi in Rome.

Aside from the subject of tuberculosis, I should have taken space to mention that both Drs. Dawson and Wilson were especially fine scholarly highly educated doctors and that each one did much for the citizens of Charleston in their private capacity and in public ways.

Today the whole treatment of pulmonary tuberculosis has changed, and we have progressed through the open air treatment, the surgical and sanitarium and also the drug treatment.

So much progress has been made, and the State has control now.

R. M. Pollitzer, M.D.
Greenville, S. C.



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Indications: Tuinal is indicated for prompt and moderately long-acting hypnosis. It is not suitable for continuous daytime sedation.

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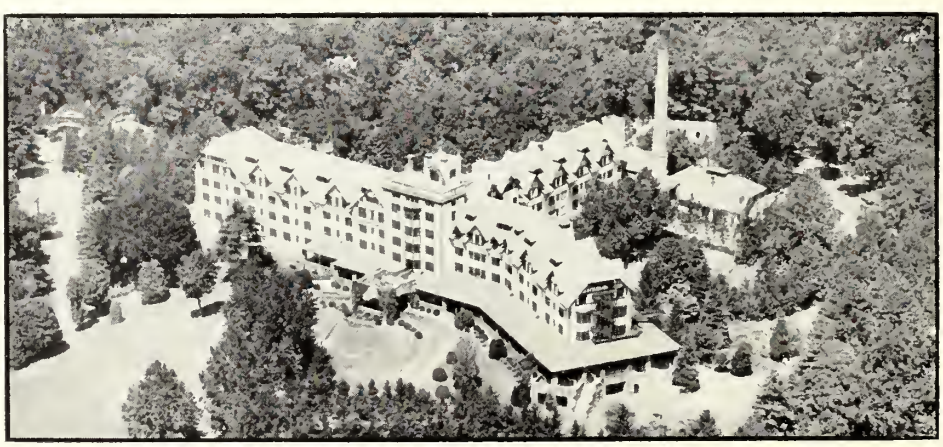
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MINUTES OF COUNCIL SOUTH CAROLINA MEDICAL ASSOCIATION

The Council of the South Carolina Medical Association met in special meeting in Columbia at 4:00 p.m., January 17, 1968.

Mr. Blanchard, Field Representative of the AMA, was introduced to the group by Mr. Meadors.

Dr. Eaddy commented on the recently published Workmen Compensation Fee Schedule by the South Carolina Industrial Commission. He noted that a copy of this could be had through the R. L. Bryan Company in Columbia. He asked Dr. Waring to make special note of the fee schedule and how it might be obtained by the doctors of South Carolina, suggesting that this be publicized in the SCMA Journal.

Dr. Eaddy commented on a letter that he had received from the President of the South Carolina Optometric Association, asking for a liaison meeting between representatives of the two societies. This request came out of recent action taken by the Judicial Council of AMA regarding optometrists.

A study committee was appointed by the last S. C. Legislature to study the feasibility of allowing osteopaths to practice as medical doctors in South Carolina. This committee was named as follows: Mr. Watson, Mr. Cuttino, and Mr. Turner, from the House of Representatives; Dr. Brockington, Mr. Roddy, and Mr. Shumaker, from the Senate; also, Dr. Johnson, President of the S. C. Osteopathic Association; Dr. McCord to represent the Medical Profession as President of the South Carolina Medical College, and Dr. Norman O. Eaddy as President of SCMA. Dr. McCord was present to discuss the problem with Council and he was introduced by Dr. Eaddy.

Council went into executive session during this report and at the culmination of the report Dr. McCord was thanked for his conscientious study and report.

Plans for dissemination of material and handling of the Public Hearing on the Osteopathic Bill was discussed, but no action was taken.

A letter from Dr. Owens to Mr. Meadors regarding a bill which is to be presented to the Legislature by the optometrists was presented.

"The Optometric Association has a bill in the Medical Affairs Committee which they are interested in having passed. It sets up a service corporation somewhat similar to Blue Cross-Blue Shield. As I recall last year's hearing, the main objection was to Section 17, which reads as follows: "No optometric vision service corporation (no medical service corporation) shall be liable for injuries resulting from negligence, malfeasance, or malpractice on the part of any officer or employee or on the part of any optometrist (physician) in the course of rendering optometric vision services (medical services) to subscribers".

This appears to be practically identical to Section 37-1117 in the Blue Cross-Blue Shield enabling legislature which reads as follows: "No medical service corporation shall be liable for injuries resulting from negligence, melfeasance, non-feasance, or malpractice on the part of any officer or employee or on the part of any physician in the course of rendering medical services to subscribers".

In view of this similarity, I do not see how objection could be raised to the Optometrical bill Section 17 unless also raised to Blue Cross-Blue Shield 37-1117.

Since the optometrists are not covered by Blue Cross-Blue Shield, it appears they have a good argument in organizing a similar corporation. I would appreciate your comments on this."

It was the opinion of Council that this bill was not out of line and Dr. Johnson moved that this bill not be opposed. The motion was put and carried.

Mr. Meadors delivered a message from Dr. Robert Wilson regarding the S. C. Diabetic Association (affiliate of the American Diabetic Association). Dr. Wilson seeks approval of Council regarding construction of a Diabetic Camp in upper South Carolina. Dr. Johnson moved that Council approve of such action. This was put and carried. This action will be indicated to Dr. Wilson by Mr. Meadors.

Dr. Clay Evatt presented to Council a recent paper delivered by Mr. Ray Everett to a Charleston Service Club. The title of his paper is "A Look at the Hospital Care Financing Picture in the Charleston Area". This excellent paper and statistical data were given to Council members individually as information.

Dr. Joel Wyman commented on SCALPEL, again urging Council and members of the SCMA to support this organization in every way.

Mr. Meadors announced the dates of the Council Meeting at Myrtle Beach. The first meeting of Council will be at 10:00 a.m. on Sunday, May 12. Council will meet on subsequent days, May 13, 14, and 15.

Mr. Meadors announced that the banquet of SCMA will be on May 14.

Mr. Meadors listed doctors who had practiced for 25 years and now retired, indicating that these people are in the status not to require payment of dues. These are Dr. G. S. T. Peeples of John Island, and Dr. A. Brennan Calder of Sumter. It was moved and passed that these men be allowed this special position.

Ben N. Miller, M.D.



New officers of the Greenville County Medical Society, Inc. include **Dr. Frank Stelling**, president; **Dr. William C. Craig**, vice president; **Dr. Marion Waters**, secretary; **Dr. Lucius Cline**, treasurer. **Dr. Charlton P. Armstrong**, a senior associate in the division of urology on the medical staff of the Greenville General Hospital, has succeeded **Dr. Leslie C. Meyer** as president of the medical staff. **Dr. Eleanor W. Townsend** is retiring as director of the State Board of Health Laboratory, a position she has held since 1958, but she will remain chairman of the Medical Laboratory Advisory Group of the State Board of Health. **Dr. Preston Hampton Edwards** retired Jan. 1 as health officer of Chesterfield and Marlboro Counties, a position he has held since 1951. He formerly was health officer for Georgetown and Horry Counties. **Dr. Harvey Oberman** has announced the opening of his office for the practice of internal medicine at 116 B Ashley Avenue, Charleston. **Dr. Arthur Wells Lowman**, who has practiced medicine in Denmark for 34 years, officially retired on Dec. 31, although he had not practiced since Oct. 1. He was forced to retire because of declining health. He was graduated from the Medical College of South Carolina in 1921 and interned at Roper and Baker Hospitals in Charleston. Dr. Lowman served as president of the Seaboard Air Line Railroad Surgeons Assn. and was a member of the Atlantic Coast Line Assn. He also served as chairman of the City Board of Health. In February, **Dr. George H. Orvin**, director of the Medical College of South Carolina's new Division of Adolescent Psychiatry, was scheduled to deliver a series of lectures at Littermore Hospital, England. He was invited by Bertram Mandebrote, physican and superintendent of the hospital and lecturer in psychological medicine at Oxford University.

Dr. Hugh V. Coleman of Marion has been recently named to the South Carolina Committee on Trauma of the American College of Surgeons. This committee is composed of 20 South Carolina surgeons who have training and interest in the various aspects of prevention and treatment of injuries. **Dr. Kenneth Warren** of Greenville will supervise a new kind of program to train mental health technicians at the Greenville Technical Education Center. Dr. Warren is chairman of the Greenville TEC's advisory committee for mental health specialists. **Dr. Leon Hunt** has re-opened his office for the general practice of medicine in Bishopville. He has been on active duty with the U. S. Army for the past two years, a portion of which he spent on a tour of duty in Korea. **Dr. Fletcher C. Derrick Jr.**, an associate in urology at the Medical College of South Carolina and chief of the urology service at the Veterans Administration Hospital in Charleston, was recently given a Distinguished Service Award by the Charleston Jaycees. **Dr. Edmund R. Taylor** has been elected chief of the medical staff at Columbia Hospital. **Dr. Hugh H. DuBose** was named vice-chief of staff and **Dr. B. Daniel Paysinger**, secretary. **Dr. William T. Hendrix** of Spartanburg was recently elected to the board of trustees of North Greenville Junior College. **Dr. George Price** of Spartanburg has been appointed to a five-member committee to nominate officers and directors for the American Academy of General Practice. **Dr. James Wilson** has been re-elected to his sixth term as president of the trustees of the Charleston Museum. Recently

elected officers of the Anderson County Medical Society include **Dr. Leonard W. Douglas**, president; **Dr. William P. Kay Jr.**, vice president; **Dr. William E. Kennedy**, secretary and **Dr. Charles Bailes**, treasurer. **Dr. Randolph Smoak Jr.**, who recently located in Orangeburg for the practice of surgery has been advised by the American Board of Surgery that he has successfully completed his second examination and is now a Diplomate of the American Board of Surgery. He took his first exam about one year ago in Texas and in December, his second one in Cleveland.



Dr. (Capt.) Robert Jackson

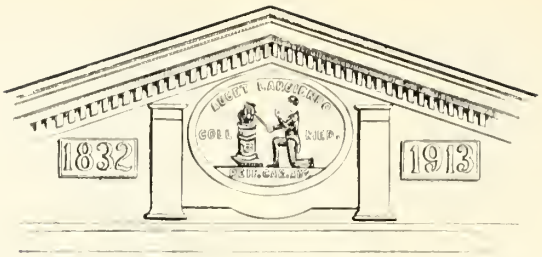
Dr. Kim Wood has been named chief of staff at the Divine Savior Hospital in York. **Dr. Henry R. Kuemmerer** has announced his decision to be a candidate for Oconee County School Trustee, countywide. Dr. Keummerer is president of the Oconee County Medical Society. **Dr. James W. Warren** was recently elected president of the medical staff of St. Eugene Hospital in Dillon. Also elected: **Dr. Swift C. Black**, vice president and **Dr. R. H. Cain Jr.**, secretary. **Dr. Hubert Claytor** has begun the practice of internal medicine in Columbia at 2011 Hampton St. He received his M.D. from the Medical College of South Carolina and served his internship at Grady Memorial Hospital in Atlanta. **Dr. C. Dayton Riddle** of 9 Medical Court, Greenville, was inducted as a Fellow of the American Academy of Orthopaedic Surgeons at their 35th annual meeting held recently in Chicago. **Dr. Charles G. Spivey**, a Columbia physician since 1930, has semi-retired and moved to Edisto Beach where he will conduct a limited practice. **Dr. Leon Banov** of Charleston was recently elected president of the Widows and Orphans Society. **Dr. R. Layton McCurdy**, associate professor of psychiatry at the Emory University School of Medicine, has been named chairman of the Psychiatry Department at the Medical College of S. C. Four physicans at the Medical College of S. C. have been awarded fellowships for training in cancer diagnosis and treatment by the American Cancer Society. They are **Dr. Fletcher Derrick** of Johnston, **Dr. H. Biemann Othersen** of Charleston, **Dr. Walter M. Newton Jr.** of Bennettsville and **Dr. John P. Sutton** of Greenville. **Dr. (Capt.) Robert E. Jackson**, 31, of Manning, who is stationed at England AFB, La., recently received the Legion of Merit for his efforts in the practice of medicine in Southeast Asia. He is currently chief, flight medicine division for the 1st Air Commando Wing in England.

NEW MEMBERS

Dr. Samuel V. Johnson
Kingstree
Dr. Claud L. Stephens
Kingstree
Dr. Harold C. Morgan
Columbia

JOURNAL ON MICROFILM

All back issues of The Journal of the South Carolina Medical Association are now available on microfilm through University Microfilms, Inc., 313 North First Street, Ann Arbor, Michigan, 48107.



Medical College of South Carolina

Dr. Curtis P. Artz spoke before the Cincinnati Surgical Society on Jan. 3 on the topic of "Clinical Application of Dialysis of Thoracic Duct Lymph."

On Jan. 12, **Dr. William H. Lee, Jr.**, participated in a Columbia Univ. seminar on "Non-Thrombogenic Surfaces of Chemically-Bonded Heparin" in N. Y. City.

Dr. Lee attended the National Research Council Program in Washington, D. C., Feb. 29-March 2, where he discussed Post Traumatic Pulmonary Syndrome."

On Jan. 29, **Dr. R. R. Bradham** spoke to the Florence County Medical Society on "Myocardial Revascularization."

Dr. Lawrence L. Hester presented a paper entitled "Radio-Active Colloidal Chromic Phosphate in the Treatment of Ovarian Malignancy" before the South Atlantic Assn. of Obstetricians and Gynecologists meeting held in Miami on Jan. 14-17.

Dr. William W. Vallotton, Prof. and Chairman of the Dept. of Ophthalmology, and **Dr. James V. Ward**, Ophthalmology Chief Resident, gave a series of lectures at the School of Medicine of the Universidad Nacional Mayor de San Marcos in Lima, Peru, from Feb. 3-21.

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These things being true, I cannot—I will not—stand idly by when these hard-won freedoms are under attack.

For I believe that the values upon which this country was founded are immutable and have not been eroded by the passage of years.

I believe that I, as a free citizen in a free land, am obligated to defend my beliefs in the ways permitted to me, and required of me, by our form of government.

Therefore, let no man seek to bar me from the political process; for it would be akin to denying my right to participate in the process that determines free government.

SCALPEL and AMPAC need you. Join today for 1968. Send $20.00 to the South Carolina Medical Association office, 113 North Coit St., Florence, S. C. 29501.

REGIONAL MEDICAL PROGRAM

Dr. Dwight L. Wilbur, president-elect of the American Medical Association, warned that physicians will resist any effort to establish national medical standards under the Regional Medical Programs.

But he predicted that the medical profession would cooperate enthusiastically if the programs are carried out on a voluntary cooperative basis.

Dr. Wilbur spoke at a conference on Regional Medical Programs sponsored by the Department of Health, Education and Welfare.

"If the program in fact is clearly one designed to catalyze and to facilitate the development of better programs than now exist to serve patients and their physicians it will undoubtedly receive enthusiastic cooperation from the medical profession and related groups," Dr. Wilbur said. "We know that the law and its legislative history stress the voluntary cooperative nature of the program and that interference with existing patterns is specifically prohibited . . .

"Unlike many other countries, our nation has reached its preeminence in many areas of activity because of this unique combination of multiple independent focal points of activity cooperating on a voluntary basis to achieve a commonly desired goal . . .

"If RMP maintains its current emphasis on the working together of regional groups, it will fulfill its purpose of improving the quality, accessibility and availability of health care, physician and instiutional performance, and consumer satisfaction.

"On the other hand, if RMP becomes an instrument for the establishment of national standards with the coercive compliance compelled by such standards, it will arouse nationwide resistance from physicians, institutions, and allied health professionals. What can be gained by cooperation and meaningful participation will surely be lost if the use of coercive power, which for the moment lies dormant in Public Law 89-239, becomes its dominant characteristic . . .

"RMP is in a strategic position to bring about changes acceptable both to physicians and their patients that will improve performance and patient satisfaction without undermining patterns of behavior that are traditional, and, more significant, considered by the medical profession essential to the preservation of high quality care."

OBESITY CONTROL

The American Medical Association told Congress that weight reduction is a leading health area for quackery.

The AMA position on weight reduction, particularly as so-called diet pills are involved, was outlined by Drs. Theodore B. Van Itallie of New York, N. Y., a member of the Council on Foods and Nutrition, and Harry C. Shirkey of Birmingham, Ala., vice chairman of the Council on Drugs in testimony before the Senate Antitrust and Monopoly Subcommittee.

The subcommittee was investigating reports that some osteopaths and physicians were making large incomes from assembly-line administration of multicolored "diet" pills containing such drugs as barbiturates, thyroid extract, amphetamines, thiazine, diuretics, laxatives and various hormones.

Officials of Illinois and Oregon testified that such pills were involved in at least 20 deaths in their states.

"Perhaps in no other area of health and medical problems do we encounter as much food faddism and quackery," Dr. Van Itallie testified. "The obese are extremely gullible, forever willing to believe that some day a gadget, a diet, a pill, or a book will lead to the miracle of easy and painless reduction of weight. While most of the quackery originates with health hucksters who have no scientific back-

ground, training, or qualifications in the medical or nutritional fields, unfortunately a physician is occasionally involved.

"The American Medical Association has long utilized its various publications to bring to the profession and the public up-to-date information on the latest scientific advances in the area of obesity control. It frequently focuses attention upon those irregular practitioners and faddists who prey upon the unsuspecting public. As the national voice of Medicine, we believe that it is incumbent upon us to help protect the public from those practices which have the potential of adversely affecting the public health. . .

"A physician who assumes the responsibility for treating obesity takes on a difficult role. Few other medical disorders require the same disciplined and prolonged cooperation of the patient in their treatment. Even under the best of circumstances, the results of treatment become apparent slowly. The inherent handicaps may strain the busy physician's patience and tempt him to resort to unsound methods of treatment. He must have a clear understanding of the physiological and psychological problems of obesity in order to treat it wisely."

Dr. Shirkey broke down weight drugs into seven general classifications: (1) cardiac glycosides; (2) hormones, chiefly thyroid; (3) diuretics; (4) anorexiants (appetite suppressants); (5) laxatives; (6) sedatives; and (7) antispasmodics. Of them he said:

Cardiac glycosides: "Their use for obesity is reprehensible and may well have attributed to the few reported deaths of patients receiving such treatment."

Hormones—Thyroid: "There are at least three irrationalities . . . in this hormonal approach to the treatment of obesity."

Diuretics: "There is no rational basis for the use of diuretic drugs in the treatment of simple obesity."

Anorexiants: "Amphetamines are useful as a crutch to help the patient become accustomed to a rigorous reducing diet. But long-term administration is not justified because they tend to become less effective and, in addition, can lead ultimately to habituation."

Laxatives: "There is little rational basis for the use of laxatives in the treatment of obesity."

HEALTH CARE COSTS

President Johnson said the administration would take additional steps to abate the increases in health care costs and to increase the numbers of health personnel.

In his economic message to Congress, he said:

"The supply of qualified health personnel has lagged behind the expanding demand. I will shortly propose new measures to increase this supply.

"Last year, medical care prices rose 7 percent, more than twice as fast as other prices. I shall propose new measures to slow down the spiraling cost of health care."

In his State of the Union message, the President included in a list of "absolutely intolerable" conditions which he said had existed for many years: "Hospital and medical costs are high, and they are rising." He did not amplify the brief statements in either of these two messages, leaving the details for a later health message to Congress.

Chairman Abraham A. Ribcoff (D., Conn.) said the Senate Government Operations Committee would conduct a two-year investigation into the rise in hospital and other health care costs. He said the subcommittee's study also would be concerned with the numbers of physicians and other health personnel .

Mr. Johnson said he also would propose a child health program and stricter penalties for those who traffic in LSD and other dangerous drugs. The child health program would provide poor fami-

lies over the next five years with health service from prenatal care of the mother through the child's first year.

The budget for the Department of Health, Education and Welfare allotted $6 million for medical education in fiscal 1969, for the year beginning next July 1, an increase of more than $16 million. Federal aid for allied health training was decreased from $19 million to $17.2 million.

Medicare expenditures for fiscal 1969 were estimated at $6.3 billion, compared with $5.7 billion for the current fiscal year.

Family planning programs of the federal government would be greatly expanded. The goal is to provide birth control information to one million women by quadrupling the size of the family planning services budget from $6 million to $24 million.

LEGISLATIVE CHANGES IN MEDICARE — (H.R. 12080)

On December 15, 1967, several changes in the Medicare Law were passed. These were signed into law by President Johnson on January 2, 1968.

Following is a list of significant changes.

MEDICARE CHANGES WHICH WILL DIRECTLY AFFECT PHYSICIANS:

Payment of Physician Bills Under the Medicare Program

This means that the patient may file for Medicare benefits with the physician's itemized bill, *whether or not the physician has been paid,* and *payment will be made directly to the beneficiary.*

Time Limit on Filing Medicare Claims

Claims for the services in question will, in general, have to be filed no later than the end of the calendar year following the year in which the services are furnished. Please note that under the above stipulation, beneficiaries *may lose benefits* unless claims for services during July, August, and September of 1966 are filed before March 31, 1968.

Eye Refractions

The above excludes from coverage all procedures to determine the refractive state of the eyes performed during any eye examination (even in connection with furnishing prosthetic lenses); and even if performed by an M.D.

Physician Certification

The bill eliminates the physician certification requirement for hospital outpatient services and admissions to general hospitals.

Physician certification is retained for payment of services by psychiatric and tuberculosis hospitals, extended care facilities and home health agencies. There certifications are important and meaningful because special conditions (such as prior hospitalization) are attached to payment for services furnished by these providers. The requirement for physician certification after inpatient hospital services have been furnished over a period of time is also retained. Certification is required as of the 14th day of hospitalization, the first recertification no later than the 21st day, and subsequent recertifications at intervals established by the utilization review committee, not to exceed 30 days.

THE FOLLOWING CHANGES WILL HAVE SOME EFFECT ON PHYSICIANS, HOSPITALS, AND PATIENTS:

Additional Days of Hospital Care

The bill provides that each medicare beneficiary will have a lifetime reserve of 60 days of added coverage of hospital care after the 90 days covered in a "spell of illness" have been exhausted. Coinsurance of $20 per day will be applicable to these added days of coverage.

Inclusion of Podiatrists' Services

The bill covers the nonroutine services of doctors of podiatry or surgical chiropody under the medical insurance program. In addition, the bill excludes routine foot care from coverage whether per-

formed by a podiatrist or a medical doctor.

Payment for Services in Nonparticipating Hospitals

The bill provides payments for inpatient services (whether or not emergency services) furnished to beneficiaries admitted before January 1, 1968, to nonparticipating hospitals that meet the new definition of "emergency hospital" described below. Under the new provisions, nonparticipating hospitals may continue to apply for payment for emergency services on a reasonable-cost basis, but only if they agree to bill the program for all such services furnished during the year.

Payment Under the Supplementary Medical Insurance Program for Noncovered Hospital Ancillary Services

The bill permits payment under the supplementary medical insurance program for certain ancillary hospital and extended care facility services, principally X-ray and laboratory services, for which no payment may be made under the hospital insurance program—where, for example, the patient has exhausted his eligibility under that program or where an extended care faciilty patient has not satisfied the prior-hospitalization requirement.

This provision applies to services furnished after March 31, 1968.

Payment for Purchase of Durable Medical Equipment

The bill permits payment to be made for durable medical equipment that has been purchased by the individual.

Payment for Outpatient Physical Therapy Services

The bill covers under the supplementary medical insurance program for diagnostic X-ray services furnished in a patient's home or in a nursing home if the services are provided under the general supervision of a physician and if the performance of the tests meets health and safety regulations.

Blood Deductibles

The bill broadens the definition of "blood" to include packed red blood cells as well as whole blood and extends the application of the 3-pint deductible provision to the supplementary medical insurance program as well as to the hospital insurance program.

THE SOUTH CAROLINA SANATORIUM

Report of Governor's Committee to Study The Present and Future of the S. C. Sanatorium

CONCLUSIONS

1. There is immediate need to:
   a) Obtain a medical director qualified is respiratory diseases.
   b) Upgrade and improve the medical staff and medical services.
2. Immediate steps should be taken toward certification of the S. C. Sanatorium for participation in federally funded medical programs—i.e., Medicare, Medicaid, and other federal programs administered by State agencies.
3. Services of the Sanatorium should be unified under the tuberculosis control activities of the State Board of Health i.e., all in-hospital treatment and all out-patient care should be coordinated under the Tuberculosis Control Division of the State Board of Health.
4. The establishment of a Tuberculosis Control Advisory Committee by the Governor, upon recommendation of the State Board of Health, is urged.
5. There is need for closer integration of the vocational rehabilitation program into the total health services rendered by the Sanatorium.
6. Utilization of services available from the Medical College staff and local physicians should be explored, with a view toward improving medical care given patients at the Sanatorium.
7. Health services offered at the Sanatorium should be expanded to meet existing health needs of the State, and specifically, the treatment of chronic respiratory diseases.



Dr. Donald H. Robinson

NEWS

The State Board of Health has announced the appointment of Dr. Donald H. Robinson as director of the Bureau of reventive Health Services.

A native of Philadelphia, Dr. Robinson received his B.S. degree from Grove City College, Pa.; his M.D. degree from Hahnemann, Pa. and his Masters degree in public health from Johns Hopkins. He also holds a law degree from Blackstone School.

He served 12 years in the armed forces and was Chief of Medical Operations for the 8th Army during the Korean war. After military service, Dr. Robinson was Director of Medical Services, Pittsburg Health Department for a period of two years. This was followed by three years as assistant Medical Director of Standard Oil Company of California.

From 1960 to the present he served with the Panama Canal Health Bureau.

He has taught at Grove City College; University of Cincinnati; University of Pittsburgh; Duquesne University; University of San Francisco and Canal Zone College.

Dr. Robinson has written over 2,000 magazine artices, and is the author of three books. He is a member of the Industrial Medical Association; a Fellow of the American Public Health Association; and a member of the American Medical Association.

MEETINGS

The American College of Physicians will hold its 49th Annual Session April 1-5 in association with the Royal College of Physicians of London.

The annual meeting will be held in Boston, Mass., with some 5,000 specialists in internal medicine expected to attend the sessions at the Sheraton-Boston Hotel and the War Memorial Auditorium.

The Royal College of Physicians of London is one of the world's oldest medical societies and is celebrating its 450th anniversary this year.

The spring session of the American Academy of Pediatrics will be held in Atlanta, Ga. March 18-20.

From April 17 to April 20, the Chicago Committee on Trauma will present its 12th Post Graduate Course on Fractures and Other Trauma. It will attempt to cover many aspects of injuries. This includes abdominal, thoracic, genito-urinary, ophthalmologic, neurosurgical and vascular trauma, as well as musculo-skeletal trauma.

Registration can be accomplished by writing to James P. Ahstrom, Jr., M.D., chairman, 12th Post Graduate Course, American College of Surgeons, 55 East Erie St.., Chicago, Ill. 60611.

A symposium on Correlations in Medicine: The Clinician and the Laboratory is being sponsored April 11 to 13 in St. Petersburg, Fla. For more information write: Mound Park Hospital Foundation, Inc., St. Petersburg, Fla., 33701. The foundation is also sponsoring a symposium on Gastric Psychiatry May 2-4.

The South Carolina Medical Association's Committee on the Medical Aspects of Sports is planning a conference on that subject at the Clemson House in Clemson April 25.

An all-day program is planned and will be directed at the coach and student trainer as well as the physician. Those interested in sports and its medical aspects should plan to attend.

Health Education and Health Care Services will be the theme of the AMA's 3rd National Conference on Health Education to the Public, April 4-6, at the Pick Congress Hotel, Chicago.

The three-day program will center around the physician's role in health education and community health, as well as the responsibility of the professional health educators. One session will be devoted to the psychological influences on health behavior.

The Annual Otolaryngologic Assembly of 1968, will be held October 12 in the Illinois Eye and Ear Infirmary at the Medical Center, Chicago.

Interested physiicans should direct communications to the mailing address:

Department of Otolaryngology
P. O. Box 6998
Chicago, Illinois 60680

Internist needed for medical service, VA Hospital, Columbia, S. C. Salary dependent upon experience and training. Please apply Chief of Staff, VA Hospital, Columbia, S. C. 29201

NOTICE

The Industrial Commission's Fee Schedule may be obtained from R. L. Bryan Company, 1440 Main St., Columbia, S. C. for $2.00.

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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

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One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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LEAFLET ON HOSPITAL COSTS AVAILABLE TO S. C. PHYSICIANS

Twenty-five complimentary copies of a new leaflet on hospital costs have been offered to all members of the South Carolina Medical Association for their use in providing information about hospital expenses to their patients. The leaflet was developed by a committee of the Division of Public Affairs and Information of the South Carolina Hospital Association, of which Dr. J. I. Waring, SCMA Journal editor, is a member.

In view of the rapid advances in the cost of hospital care and the need to explain the reasons for the increase to the public, it is hoped that all practicing physicians in the state will place copies of the leaflet in their waiting rooms. The leaflet not only explains increasing hospital charges, but also encourages patients to have adequate health insurance coverage.

A sample copy of the leaflet and an order blank for use in requesting a supply of twenty-five free copies have been mailed. Additional copies, if desired, may be ordered for $4.00 per hundred. Write the S. C. Hopital Assn., 1825 Gadsden Street, Columbia, S. C. 28201.

SCHOLARSHIPS FOR RURAL DOCTORS

A special committee studying ways to provide more rural doctors in South Carolina is thinking of recommending four times as many scholarships at the state medical college as are currently available.

Recipients of the eight scholarships each year would be required to sign contracts binding them to practice in a rural area designated by the State Board of Health for at least four years.

Rep Herbert Morgan, vice chairman of the committe, has said the committee is also thinking of recommending four dental scholarships annually with the same agreement that they practice in rural areas of the state.

Under the present rural scholarship program, eight scholarships are awarded every four years. The program has been generally regarded as inadequate in meeting increased needs for rural doctors.

VOLUNTEER PHYSICIANS FOR VIET NAM

Volunteer Physicians for Viet Nam is a program for supplying care to the civilian population of South Viet Nam through the volunteer services of U. S. physicians. The American Medical Association administers this program, which is financed by the United States Agency for International Development (USAID).

Physicians sent to South Viet Nam under this voluntary program serve a 60 day tour of duty in a provincial civilian hospital. The volunteers work with teams of U. S. military physicians or with volunteer surgical teams from other nations. These teams, assigned to USAID, serve for one year in provincial civilian hospitals to provide continuity to the U. S. medical assistance programs. The volunteer physicians provide additional medical expertise required for augmentation of the civilian care programs.

Thirty-two volunteers must be sent to Viet Nam every 60 days to keep hospital staffs at full strength. General practitioners, general surgeons, internists, ophthalmologists, orthopedic surgeons, pediatricians and preventive medicine specialists are needed, with the greatest demand for general and orthopedic surgeons to treat war-related civilian casualties. In anticipation of future demands, inquiries are invited from other specialists. Because of conditions in Viet Nam, only a limited number of female physicians can be accepted. Non-physicians are not recruited under this program.

Write to:

AMERICAN MEDICAL ASSOCIATION
AMA Volunteer Physicians for Viet Nam
535 North Dearborn Street
Chicago, Illinois 60610

1968 EASTER SEAL CAMPAIGN

The 1968 Easter Seal Campaign will begin March 1 and continue until April 14, Easter Sunday.

A widespread appeal for funds will be made by hundreds of state and local Easter Seal affiliates to finance treatment and rehabilitation for crippled children and adults.

Last year, nearly a quarter million handicapped persons received help from Easter Seal societies, but needs of the handicapped and costs of providing expert professional care are rising, and more money than ever before will be needed to serve the handicapped during 1968.



NEWBORN ANATOMY

Dr. E. B. Ruth of the Department of Anatomy at The Johns Hopkins University will teach a course at the Medical College this summer on "The Anatomy of the Newborn." The work will consist of lectures, dissection, and demonstrations. It will be of special interest to pediatricians, pediatric surgeons and others interested in problems relating to the anatomy of the young infant.

The course will begin Thursday, June 27, and will run eight weeks. Those interested should contact Dr. I. S. H. Metcalf, Department of Anatomy. This course is separate from the regular summer course in Human Gross Dissection, which also will be offered.



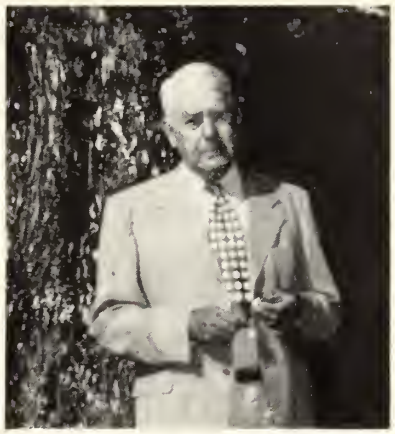
DEATH

Dr. W. Kershaw Fishburne

Dr. W. Kershaw Fishburne died Feb. 2 at the Berkeley County Hospital, Moncks Corner.

Dr. Fishburne was born in Walterboro and was graduated from Porter Military Academy and the Medical College of South Carolina. In 1904 he began his practice in Pinopolis in Berkeley County. He served as chairman of the draft board and was a medical examiner during World War I and II.

Dr. Fishburne became medical director of the Berkeley County Health Department in 1930 and served as public health officer until April, 1966. He served on the Berkeley County Board of Education and the Library Board.



Dr. W. K. Fishburne

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

MYAMBUTOL

Antitubercular Rx

Manufacturer: Lederle Laboratories

Nonproprietary Name: Etambutol HCl

Indications: Pulmonary tuberculosis. To be used in conjunction with at least one other antitubercular drug.

Contraindications: Hypersensitivity to the drug; optic neuritis.

Dosage: Adults, and children over 13 years: Initial treatment: 15 mg/kg body weight as single daily dose. Retreatment: 25 mg/kg body weight, as single daily dose, after 60 days decrease to 15 mg/kg body weight. Not for children under 13 years.

Supplied: Tablets—100 and 400 mg.

VIVACTIL HCl

Psychostimulant Rx

Manufacturer: Merck Sharp & Dohme

Nonproprietary Name: Protriptyline HCl

Indications: Mental depression in patients under close medical supervision.

Contraindications: Pyloric stenosis, glaucoma, tendency to urinary retention. Not to be given concomitantly with MAO inhiibtors, guanethidine and similarly acting compounds.

Dosage: Adults—15-40 mg, divided into 3 or 4 doses. Dosage must be individualized. Not for children under 12 years.

Supplied: Tablets—5 and 10 mg; bottles of 100 and 1000.

COMBINATION PRODUCTS

ANTIBIOTIC OINTMENT

Antibiotic—Topical o-t-c

Manufacturer: McKesson Laboratories

Composition: Each Gram contains:

Bacitracin	500 u
Neomycin Sulfate	5 mg
Polymyxin B Sulfate	5,000 u

Indications: Prevention of infection of minor cuts, abrasions and burns.

Contraindications: None mentioned.

Dosage: Apply liberally twice a day.

Supplied: Tubes—½ oz.

CAQUIN Cream

Corticoid—Local Rx

Manufacturer: Tilden-Yates Laboratories, Inc.

Composition: Hydrocortisone 1%
Iodochlorhydroxyquin 3%

Indications: Dermatological disorders that may be expected to respond to corticosteroids, e.g., atopic dermatitis, contact dermatitis, impetiginized eczema, nummular eczema, infant and adult eczema, neurodermatitis, non-specific pruritus ani and vulvae.

Contraindfcations: Not for use in tuberculosis of

the skin, viral conditions of the skin, or in patients with known iodine sensitivity.

Dosage: Apply topically, 3 or 4 times daily.

Supplied: Cream—package not specified.

DIACOF

Cough Preparation o-t-c

Manufacturer: Madland Laboratories

Composition: Each 5 ml. contains:

Dextromethorphan HBr	7.50 mg
Chlorpheniramine Maleate	0.75 mg
Glyceryl Guaiacolate	25.00 mg

In an artifically sweetened, peach-flavored base.

Indications: Relief of cough, and common cold and hay fever symptoms, specially formulated for diabetics.

Contraindications: None mentioned.

Dosage: Adults—1 or 2 tsp., every 4 hours. Children 6 to 12 years—½ of the maximum adult dose. Not for children under 6 years. Do not exceed four doses per 24 hours.

Supplied. Bottles—16 oz. and 1 gallon.

DRALSERP

Hypotensive Rx

Manufacturer: Lemmon Pharmacal Co.

Composition: Hydralazine HCl 25 mg

Reserpine 0.1 mg

Indications: Moderate to severe hypertension, and certain cases of malignant hypertension.

Contraindications: Aortic insufficiency.

Dosage: Two tablets 4 times a day, later decreased to one tablet q.i.d.

Supplied: Tablets—bottles of 100 and 1000.

2G/DM

Cough Preparation o-t-c

Manufacturer: Pitman-Moore

Composition: Each 5 ml. contains:

Glyceryl guaiacolate	100 mg
Dextromethorphan HBr	15 mg

Indications: Symptomatic relief on non-productive coughs.

Contraindications: None mentioned.

Dosage: As indicated.

Supplied: Bottles—4 fluid ounces.

NORQUEN

Progesterone/Estrogen Comb. Rx

Manufacturer: Syntex Laboratories

Composition: Mestranol 0.08 mg (14 white tablets)

Mestranol 0.08 mg

Norethindrone 2.0 mg (6 blue tablets)

Indications: Oral contraception, sequential.

Contraindications: Thrombophlebitis, or history of thrombophlebitis or pulmonary embolism, liver dysfunction or disease, known or suspected carcinoma of the breast or genital organs, undiagnosed vaginal bleeding.

Dosage: Starting on day 5 of menstrual cycle, one white tablet for 14 days, then followed by one blue tablet for 6 days.

Supplied: Tablets—packages of 20 and 60.

The Physician's Prayer

The authorship of the famous physician's prayer attributed to Moses Maimonides (1135-1204) has been challenged,[1] and has been identified with Marcus Herz, a figure of a much later date. The question does not affect the virtues of the supplication, whose basic aspirations still inspire the medical profession.

Daily Prayer of a Physician

Almighty God, Thou hast created the human body with infinite wisdom. Ten thousand times ten thousand organs hast Thou combined in it that act unceasingly and harmoniously to preserve the whole in all its beauty—the body which is the envelope of the immortal soul. They are ever acing in perfect order, agreement and accord. Yet, when the frailty of matter or the unbridling of passions deranges this order or interrupts this accord, then forces clash and the body crumbles into the primal dust from which it came. Thou sendest to man diseases as beneficent messengers to foretell approaching danger and to urge him to avert it.

Thou hast blest Thine earth, Thy rivers and Thy mountains with healing substances; they enable Thy creatures to alleviate their sufferings and to heal their illnesses. Thou hast endowed man with the wisdom to relieve the suffering of his brother, to recognize his disorders, to extract the healing substances, to discover their powers and to prepare and to apply them to suit every ill. In Thine Eternal Providence Thou hast chosen me to watch over the life and health of Thy creatures. I am now about to apply myself to the duties of my profession. Support me, Almighty God, in these great labors that they may benefit mankind, for without Thy help not even the least thing will succeed.

Inspire me with love for my art and for

Thy creatures. Do not allow thirst for profit, ambition for renown and admiration, to interfere with my profession, for these are the enemies of truth and of love for mankind and they can lead astray in the great task of attending to the welfare of Thy creatures. Preserve the strength of my body and of my soul that they ever be ready to cheerfully help and support rich and poor, good and bad, enemy as well as friend. In the sufferer let me see only the human being. Illumine my mind that it recognize what presents itself and that it may comprehend what is absent or hidden. Let it not fail to see what is visible, but do not permit it to arrogate to itself the power to see what cannot be seen, for delicate and indefinite are the bounds of the great art of caring for the lives and health of Thy creatures. Let me never be absent-minded. May no strange thoughts divert my attention at the bedside of the sick, or disturb my mind in its silent labors, for great and sacred are the thoughtful deliberations required to preserve the lives and health of Thy creatures.

Grant that my patients have confidence in me and my art and follow my directions and my counsel. Remove from their midst all charlatans and the whole host of officious relatives and know-all nurses, cruel people who arrogantly frustrate the wisest purposes of our art and often lead Thy creatures to their death.

Should those who are wiser than I wish to improve and instruct me, let my soul gratefully follow their guidance; for vast is the extent of our art. Should conceited fools, however, censure me, then let love for my profession steel me against them, so that I remain steadfast without regard for age, for reputation, or for honor, because surrender would bring to Thy creatures sickness and death.

Imbue my soul with gentleness and calmness when older colleagues, proud of their age, wish to displace me or to scorn me or disdainfully to teach me. May even this be of advantage to me, for they know many things of which I am ignorant, but let not their arrogance give me pain. For they are old and old age is not master of the passions. I also hope to attain old age upon this earth, before Thee, Almighty God!

Let me be contented in everything except in the great science of my profession. Never allow the thought to arise in me that I have attained to sufficient knowledge, but vouchsafe to me the strength, the leisure and the ambition ever to extend my knowledge. For art is great, but the mind of man is ever expanding.

Almighty God! Thou hast chosen me in Thy mercy to watch over the life and death of Thy creatures. I now apply myself to my profession. Support me in this great task so that it may benefit mankind, for without Thy help not even the least thing will succeed.

1. Rosner, F. The Physician's Prayer attributed to Moses Maimonides. Bull Hist Med 41:440 (Sept.-Oct. 1967)

A new oral anti-tuberculosis drug—hailed as apparently representing a new breakthrough in treating the ages-old scourge—is now available for prescription by doctors and hospitals throughout the country.

The drug's trade name is Myambutol and is chemically known as Ethambutol.

Book Reviews



INFANT NUTRITION. Samuel J. Fomon, M.D. W. B. Saunders Company, Philadelphia and London, 1967. Pp 299. $10.50

The author attempts to provide at least a partial answer to many of the questions that trouble the thoughtful physician, nutritionist and dietitian. Requirements and advisable intakes of individual nutrients are tentatively specified, and those circumstances delineated in which vitamin or mineral supplementation is desirable. Measures for elimination of iron deficiency anemia and for assuring an adequate intake of fluoride are summarized. A practical discussion is given of nutritional considerations relating to time of introduction of cereal and strained foods into

the diet of infants. Also choices among the many available strained foods are examined.

A working definition of failure to thrive is offered, so that one may distinguish between slow rates that may yet be considered normal and those slightly slower rates that are to be considered abnormal.

A chapter on milk-free formulas is a highlight of the book. Deficiency diseases developing in infants receiving various milk-free formulas indicate the importance of the awareness of the composition and the nutritional properties of these diets. The infrequency of milk allergy in infancy as contrasted with the frequency of prescribing milk free formulas stresses the empirical abuse of these products.

This book offers a few new approaches and can be recommended as a worthwhile endeavor in advancing optimal nutrition in infancy.

William B. Gamble, Jr., M.D.

* * *

PATHOLOGIC PHYSIOLOGY. Mechanisms of Disease. Fourth Edition, William A. Sodeman and William A. Sodeman, Jr., W. B. Saunders Co., Philadelphia and London, 1967. Pp. 1051. $19.00.

The fourth edition of this valuable book should continue to be useful to the clinician and pathologist, providing a physiologic bridge between morphology and clinical disease. The sections on auto-immune disease and genetics are improved and will be useful in relating modern concepts to clinical medicine. The introduction of a brief section on hyperbaric oxygenation is an example of updating of the subject matter. In consideration of some of the body systems, the effort to present general principles will cause both pathologists and clinicians to lament a failure to relate physiologic disturbances to some specific disease processes. The two column format of the fourth edition makes reading easier.

Forde A. McIver, M.D.

* * *

NEUROPSYCHIATRY IN WORLD WAR II. Vol. 1. Zone of Interior. Prepared and published under direction of Lt. Gen. Leonard D. Heaton, Surgeon Gen., USA; Ed. in chief, Col. Robert S. Anderson, MC, USA; Editors for Neuropsychiatry, Col. Albert J. Glass, MC, USA (ret.) adn Lt. Col. Robert J. Bernucci, MC, USA (ret.). Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. Pp 898. $7.50.

The lessons of World War I and II are important to those engaged in the practice of psychiatry and the administration of psychiatric services. Experiences gained from handling of patients by the Army organization were the beginning of the rapid recent development of community mental health centers. After the end of World War II the great present day flowering of psychiatrists began.

This book does not deal with the clinical side but is rather for those interested in the history of the development of present day practice and in their administrative aspects. It emphasize organization, the need for training in psychiatry, the special duties of consultants, and relations with other agencies. It also takes note of the fact that public relations planning is important in developing such service.

The book goes into the matter of selection and induction of trainees and of the policies of the services, as well as the conflicts which were experienced in their development. It has sometihng to say of hospitals and of mental hygiene in general and includes brief mention of methods used in handling patients.

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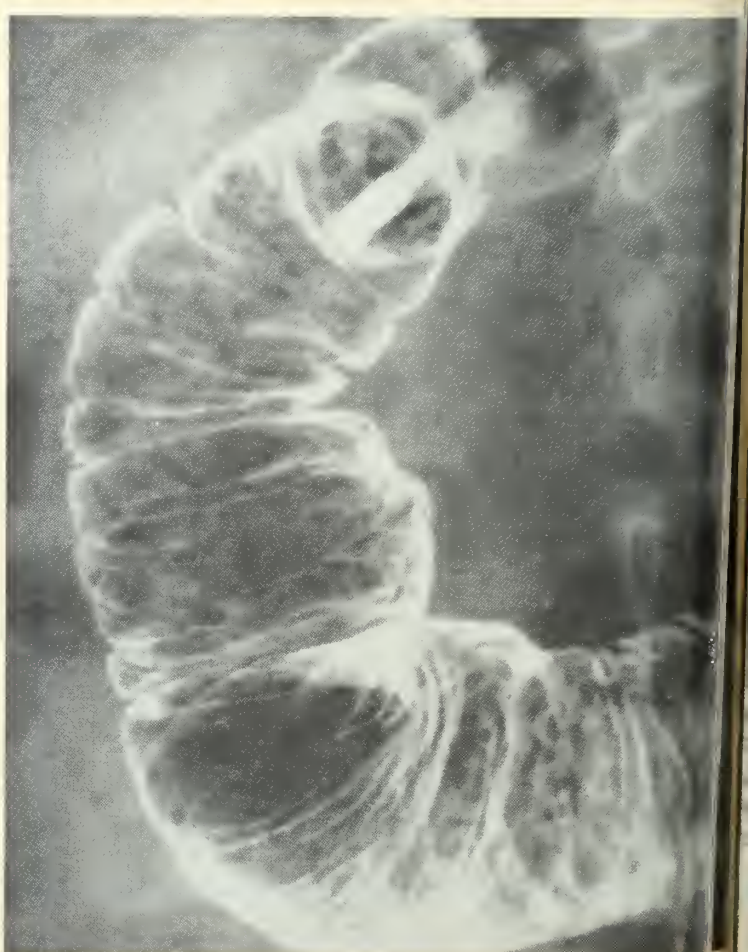
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(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27–Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology *89*:438-443 (Sept.) 1967.

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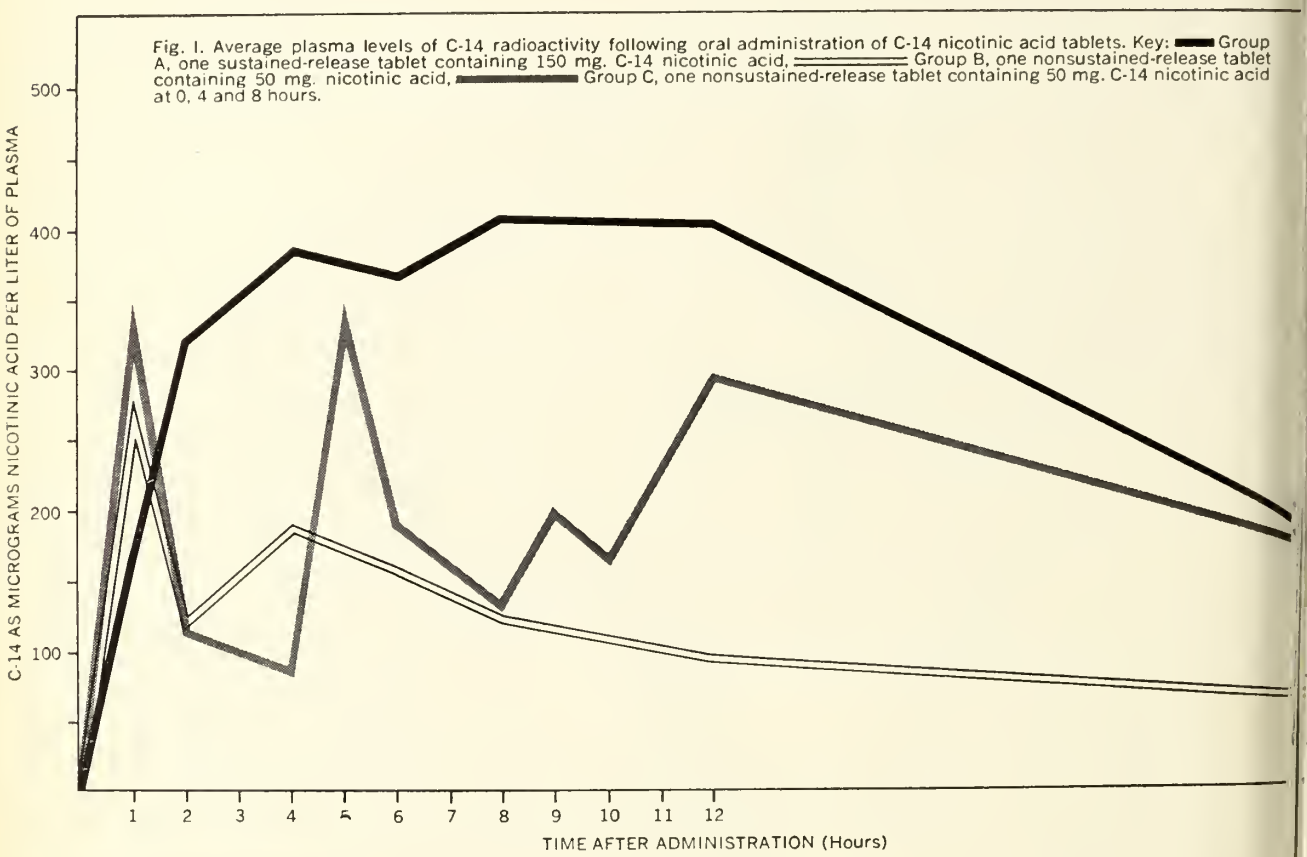


Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



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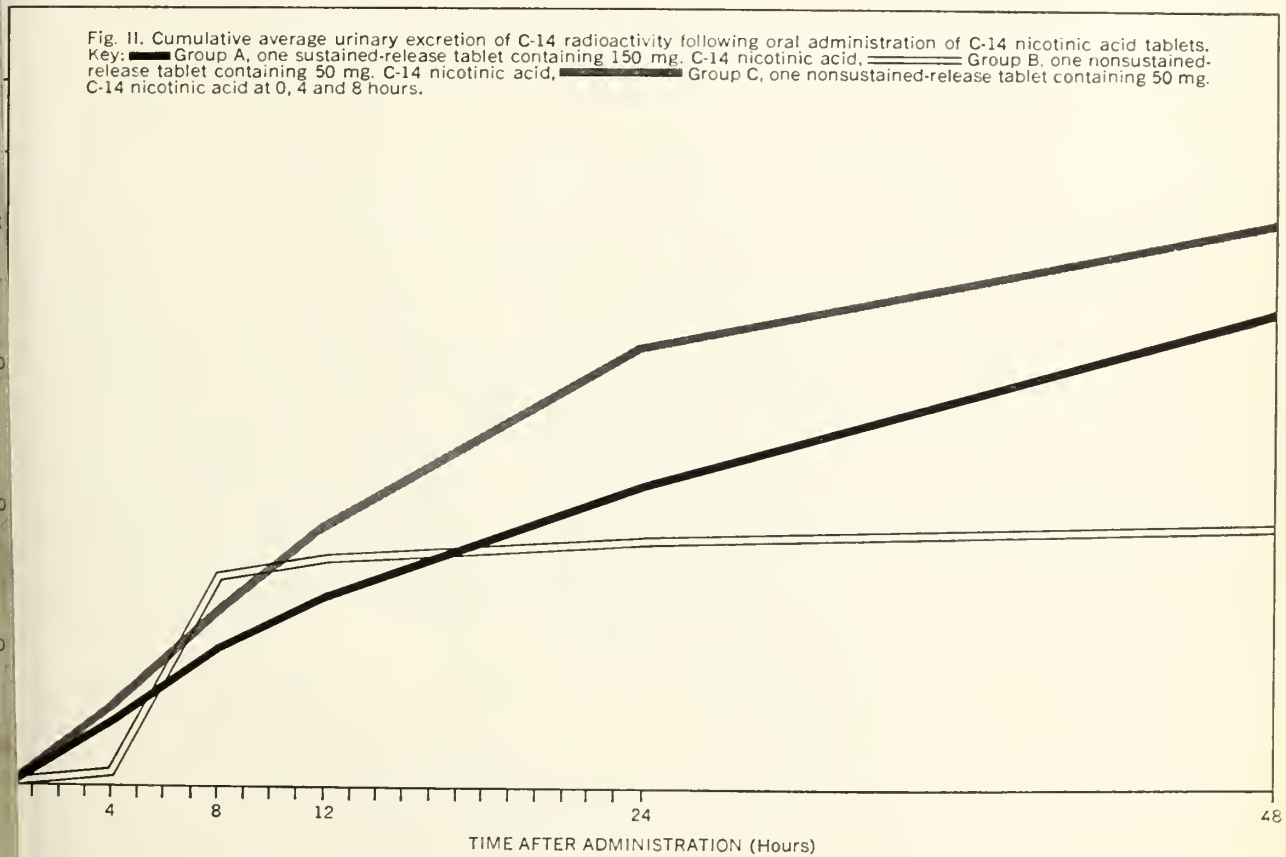


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

nfused and moody. Personal care, memory, ti al stability, social attention improve. Fatigue, th and irritability are reduced.

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ca ions: Exercise caution when treating patients a ow convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, Tofrānil should not be used during the first trimester of pregnancy.
Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment with Tofrānil. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy.
Because of its anticholinergic effect, caution should be observed in prescribing Tofrānil for patients with increased intraocular pressure.

In rare instances, transient card arrhythmias have occurred in h thyroid patients and in patients ceiving thyroid medication whe Tofrānil was added to the regim Imipramine may block the phar cologic activity of guanethidine other related adrenergic neurc blocking agents.
The drug is not recommended present time in patients under of age.
Adverse Reactions: Dryness of mouth, tachycardia, constipatic turbances of accommodation, ing, dizziness, weight gain, urir frequency or retention, nausea vomiting, peripheral neuritis, r parkinson-like syndrome, trem rare cases of falling in elderly tients, confusional states (with symptoms as hallucinations an orientation), activation of psyc schizophrenics and agitation (

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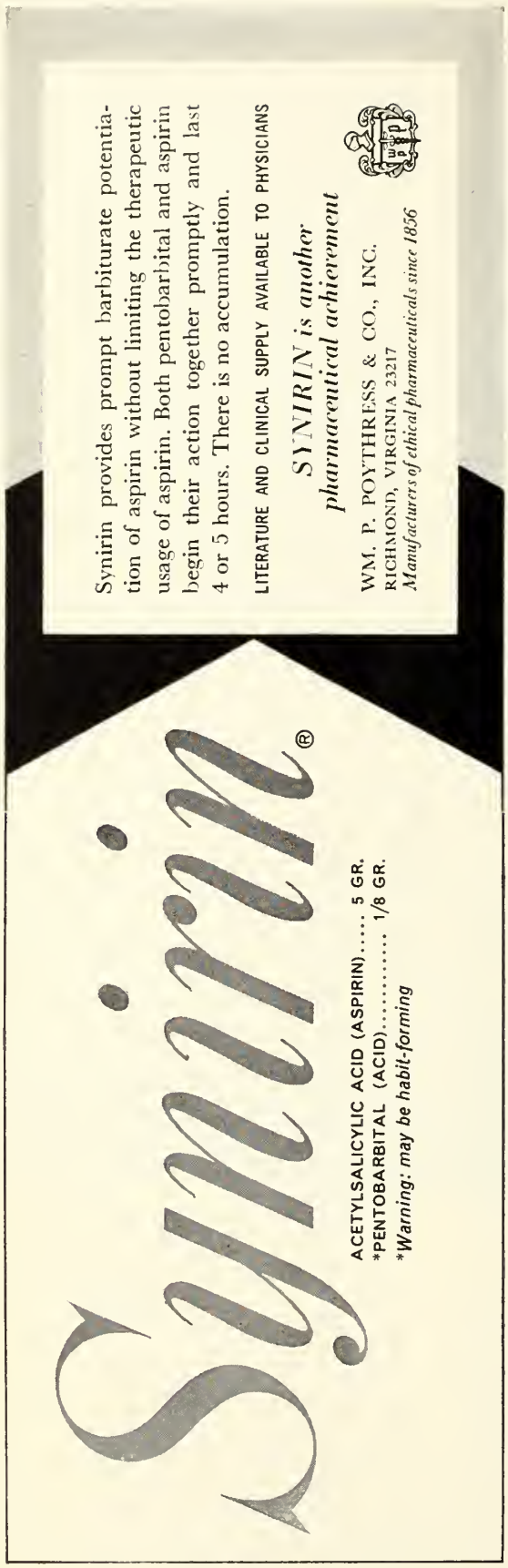
As maintenance therapy in primary depressive illness, it helps prevent relapse.

Although toxic reactions severe enough to require discontinuation of Tofrānil are uncommon, in patients with cardiovascular disease, thyroid disorders, increased intraocular pressure, or in those receiving anticholinergics (including antiparkinsonism agents), the special precautions listed in the Prescribing Information should be carefully observed. The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated.

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Geigy

...omnic and manic episodes) may equire dosage reduction ad tion of a tranquilizer or ary scontinuation of the drug, ifor seizures, orthostatic nsic and substantial blood e f in hypertensive patients, a, t sient jaundice, bone marpres on including agranulocyens zation and skin rash ng otosensitization, eosinoind ild withdrawal symptoms len scontinuation after protrea ment with high doses. ona ormonal effects (im-), d reased libido, and estro-fec) may be observed. e-lik effects may be more ice e.g. paralytic ileus) in ible atients and in those itic linergic agents (includ-ark sonism drugs).
nt Adult Dosage: Initially, ail ncreased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
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(B)46-850-C
For complete details, please refer to the full Prescribing Information.

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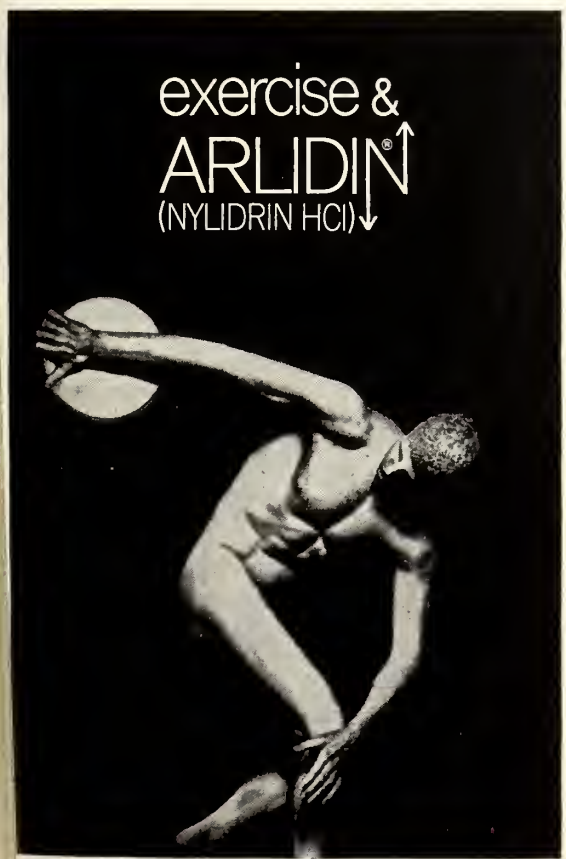
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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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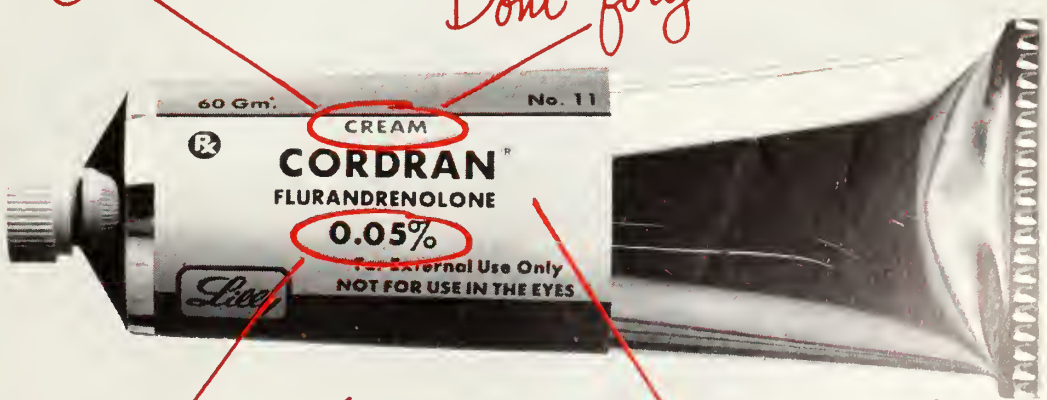
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The views expressed in this publication are those of the writers and do not necessarily reflect the opinions of the South Carolina Medical Association.

Contributions of Original Articles

Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

Illustrations—Ordinarily publication of 4 small illustrations or the equivalent accompanying an article will be paid for by The Journal. Any number beyond this must be paid for by the author except under unusual conditions. Illustrations should be sent as glossy prints or graphs in black ink with lettering large enough to show after reduction.

References—Should conform to the following order: surname and initials of author, title of article in small letters, name of periodical, with volume, page, month, day of the month if weekly, and year—e.g.: Lee, G. S.: The heart rhythm following therapy with digitalis, Arch Int Med 44:554, Dec. 1942. They should be listed numerically in order of appearance in the text. Standard abbreviation for journals should be used. Note that periods are not used with these abbreviations as indicated by the Index Medicus. Other abbreviations should also be standard— e.g. mg, ml, Gm.

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Weighing on his mind, too

TABLETS

Equagesic®

(meprobamate and ethoheptazine citrate with aspirin)

Wyeth®

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore, it should be used in pregnant patients or women of childbearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with immediate gastric lavage and appropriate supportive therapy (CNS stimulants and pressor amines as indicated).

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

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When pain evokes anxiety and tension, thereby heightening patient discomfort, a simple analgesic may only touch on part of the problem.

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Prescribing information on next page.

b.i.d. The sensible schedule that covers the patient day and night

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity: onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth— dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 G[illegible] given in equally divided doses over a period of 10 to 15 days should [illegible] followed. Close follow-up observation of the patient is recommende[illegible] including appropriate laboratory tests, since demethylchlortetracyclin[illegible] has not had adequate evaluation in all stages of syphilis. Spinal flu[illegible] examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg. of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg. every 6 hours for a minimum of 4 doses or 300 mg. every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg. every 6 hours or 300 mg. every 12 hours until a cure is effected.

Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg. in 3 divided doses for six days.

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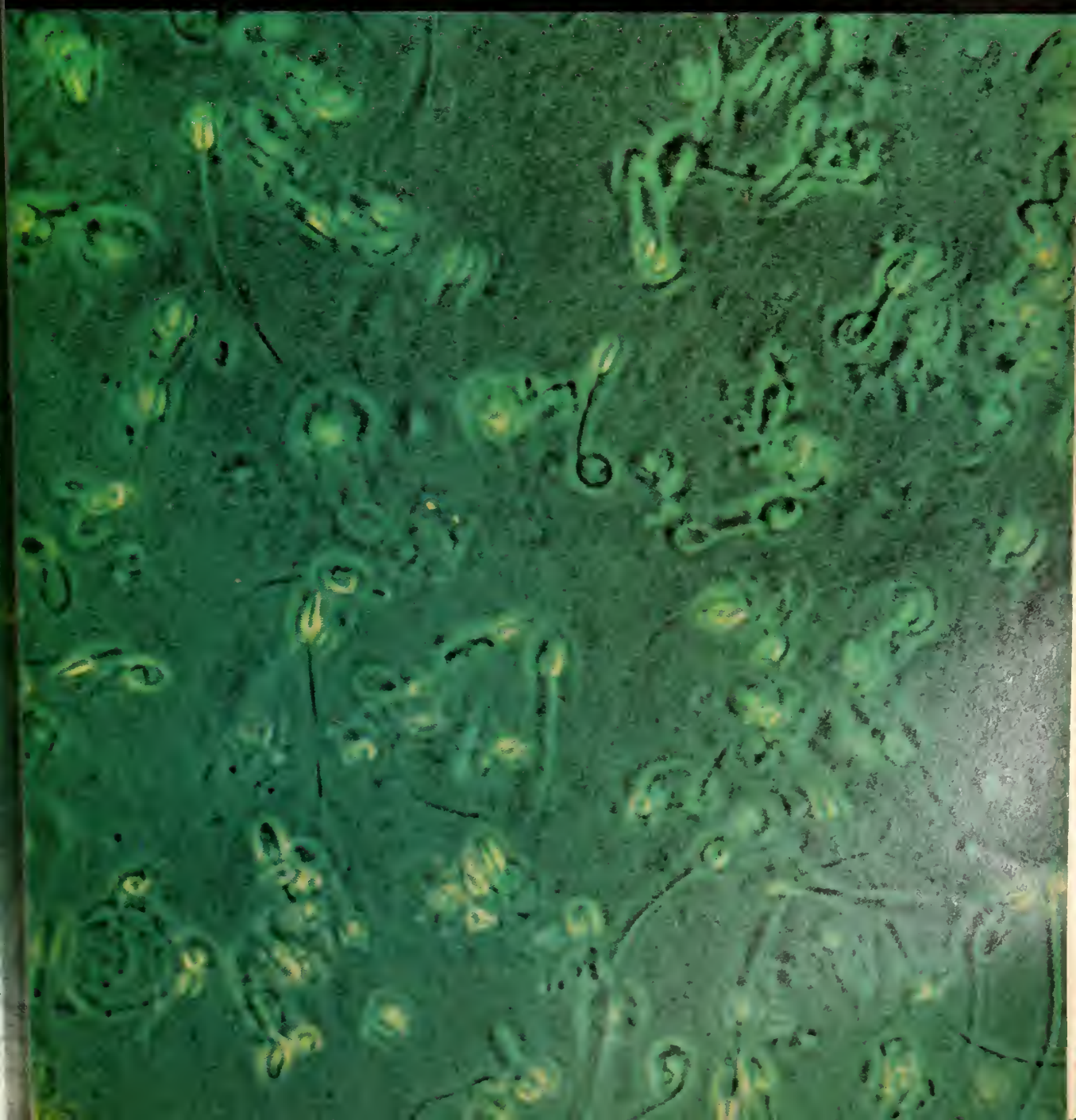
Lederle

491-7-60

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. & mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretion, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, change in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, itching.

The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has been neither established nor disproved): thrombophlebitis, pulmonary embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine, decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

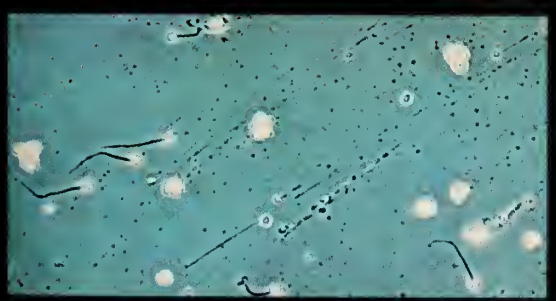
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

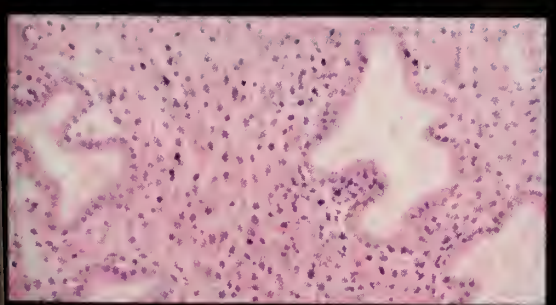
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

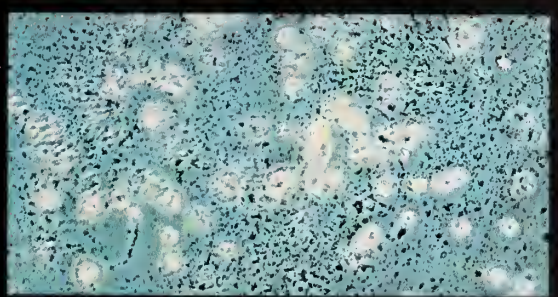


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

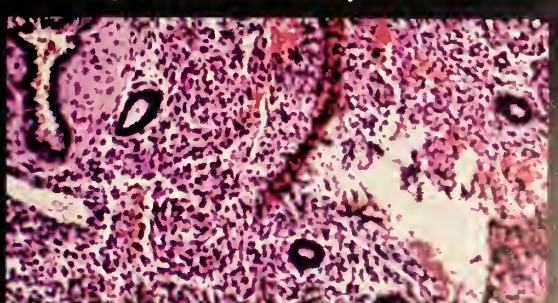
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



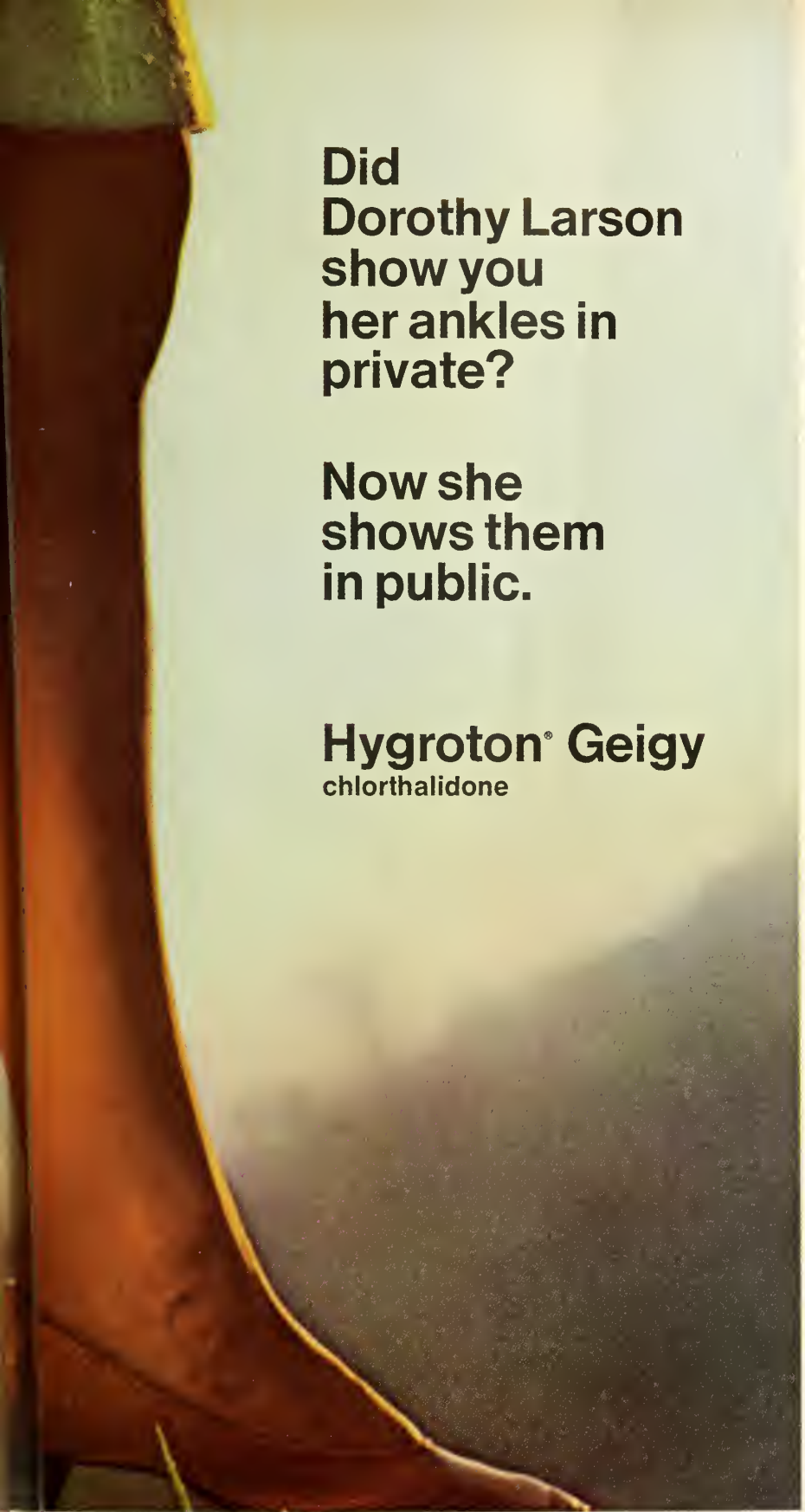
Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets
(norethindrone 1mg. ē mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost



Indications: Hypertension and many types of edema involving retention of salt and water.
Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.
Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant patients, since the drug may cross the placental barrier and adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Hygroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension.
cause of the possibility of p
sion of renal damage, perio
determination of the BUN is
cated. Discontinue if the BU
or liver dysfunction is aggra
Hepatic coma may be preci
Electrolyte imbalance, sodi
or potassium depletion may
If potassium depletion shou
cur during therapy, Hygroto
be discontinued and potass
supplements given, provide



Did Dorothy Larson show you her ankles in private?

Now she shows them in public.

Hygroton® Geigy
chlorthalidone

Your office examination confirmed Mrs. Larson's ankle edema.

You prescribed Hygroton—to get rid of the edema.

And you found that Hygroton is not only effective; it frequently costs less than other equivalent therapy.

A nice way to treat the Mrs. Larsons in your practice.

Hygroton therapy may mean troublesome side effects for some patients. A summary of the prescribing information is shown below.

nt does not have marked oli-
.
special care in cirrhosis or
re ischemic heart disease and
tient receiving corticoste-
, ACTH, or digitalis. Salt re-
ion is not recommended.
rse Reactions: Nausea, gastric
tion, vomiting, anorexia, con-
tion and cramping, dizziness,
ness restlessness, hyperglyc-
a, hyperuricemia, headache,
le cramps, orthostatic hypo-
tension, aplastic anemia, leuko-
penia, thrombocytopenia, agranu-
locytosis, impotence, dysuria,
transient myopia, skin rashes, urti-
caria, purpura, necrotizing angiitis,
acute gout, and pancreatitis when
epigastric pain or unexplained G.I.
symptoms develop after prolonged
administration. Other reactions re-
ported with this class of compounds
include: jaundice, xanthopsia,
paresthesia, and photosensitization.
Average Dosage: 50 or 100 mg. with
breakfast daily or 100 mg. every
other day.
Availability: White, single-scored
tablets of 100 mg. and aqua tablets
of 50 mg., in bottles of 100 and 1000.
(B)R46-230-D
**For full details, please see the com-
plete prescribing information.**

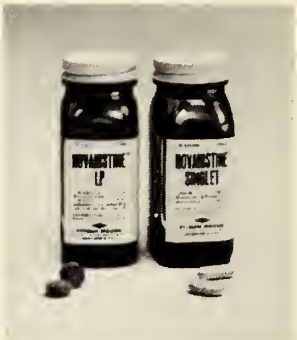
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HY-5576 R

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Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.
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Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever. Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.
Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.
Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

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When the emotionally impaired patient pays an office call...

She asks for your help, but just can't seem to follow through on your advice.

When not at your office, she's constantly on the phone: can't sleep, headache, G.I. upset.

She often seeks a physical explanation for her distressing emotional state.

She's excessively apprehensive; demands much more of your nurse's attention.



moderate to severe anxiety...

Mellaril helps control the most frequent symptoms: marked insomnia, agitation, apprehension, restlessness, hypermotility. Mellaril often alleviates anxiety-induced somatic complaints. Mellaril frequently helps strengthen emotional resources. Mellaril helps the patient maintain realistic contact with environment, closer harmony with family.

Contraindications: Severely depressed or comatose states from any cause, and in combination with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed in doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.

for moderate to severe anxiety

Mellaril® (thioridazine) 25 mg. t.i.d.

SANDOZ

Before prescribing, see package insert for full product information.

68-115

Night Leg Cramps . . . Unwelcome Bedfellow

In Diabetes[1], Arthritis[2], and Peripheral Vascular Disorders[2]



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Consistently effective, QUINAMM provided complete relief in 94% of 200 patients studied, many of whom were severe cases refractory to other medication.[3] Your prescription for one tablet at bedtime often controls painful night cramps with the initial dose . . . helps restore restful sleep.

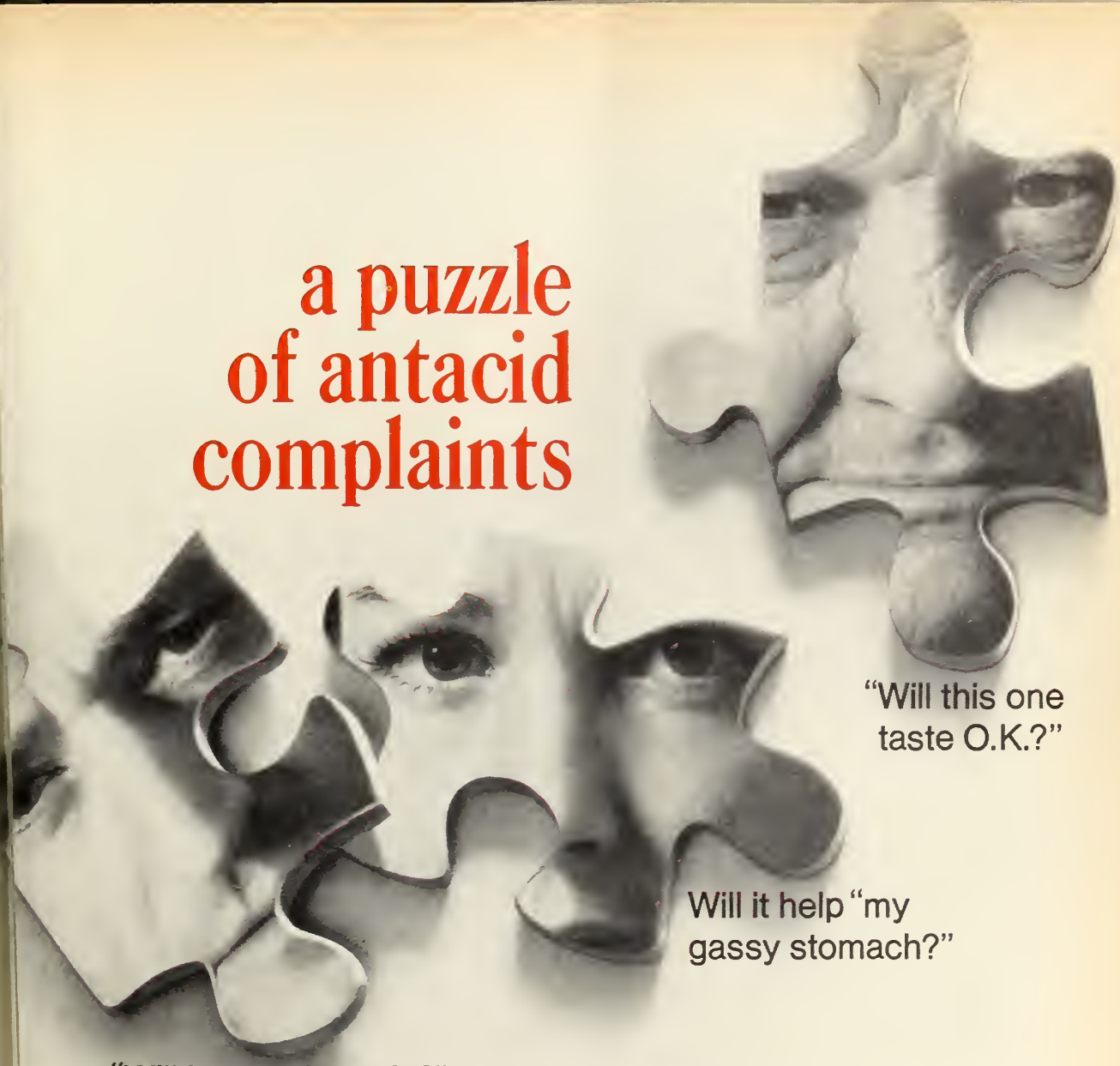
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Prescribing Information: Composition: Each white, beveled, compressed tablet contains: Quinine Sulfate 260 mg. and Aminophylline 195 mg. **Contraindication:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions:** Aminophylline may produce intestinal cramps in same instances, and quinine may produce symptoms of cinchanism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

References: 1. Shuman, C.: Am. J. Med. Sci., 225:54, 1953. 2. Perchuk, E., et al.: Angiology, 12:102, 1961. 3. Rawls, W., et al.: Med. Times, 87:818, 1959.

6/67 Q-706A

a puzzle of antacid complaints



"Will this one taste O.K.?"

Will it help "my gassy stomach?"

"Will it stop the pain?"

Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

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Concomitant relief of G.I. gas distress—
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Prolonged acceptance confirmed—
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Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

References: 1. Hoon, J. R.: Arch. Surg. *93* 467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart

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"The inconvenience of a cold"

For a cold, NTZ® Nasal Spray provides rapid relief of nasal symptoms. Relief starts with the first spray which opens the inferior part of the common meatus. A second spray, a few minutes later, will shrink the turbinates to help provide sinus drainage and ventilation. Dosage may be repeated every three or four hours as needed, for temporary relief of symptoms. NTZ is well tolerated but overdosage should be avoided.

As a sinusitis deterrent, NTZ Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

Supplied: NTZ Nasal Spray, plastic squeeze bottles of 20 ml.; NTZ Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTZ is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.



Winthrop Laboratories, New York, N.Y. 10016

Winthr



"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

Wrong! But that's no more preposterous than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more exacting. In fact, there are at least nine *specific differences* involving moisture content, purity, potency and speed of tablet disintegration, which make the manufacture of Bayer® Aspirin so different.

These Bayer standards result in significant product benefits, including gentleness to the stomach and product stability, that enable Bayer Aspirin tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.



Grounds...for Regroton®

chlorthalidone 50 mg.
reserpine 0.25 mg.



when you want to provide the combined benefits of two accepted agents in the treatment of mild to moderate hypertension. (Contraindications: history of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.)

when you want to prescribe therapy that is generally well tolerated.
(However, adverse reactions may occur. For a complete listing, please refer to the full prescribing information which is summarized below.)

when your patient wants an easy-to-remember and reasonably priced regimen. (One tablet a day usually costs about a dime.)

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue 1 week before electroshock therapy, and if depression or peptic ulcer occurs. **Use in pregnancy:** Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn. **Precautions:** Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. **For details, see complete Prescribing Information.** (B)46-600-B

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Division of Geigy Chemical Corporation
Ardsley, New York 10502

Regroton® **Geigy**

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Richmond, Virginia

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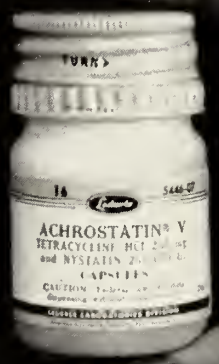
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Tetracycline HCl 250 mg /Nystatin 250,000 units



The lowest priced tetracycline-nystatin combination

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What can be done for Susan Jane To stop the runs and crampy pain?

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa.

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls three times daily.

ROERER

WILLIAM H. RORER, INC.
Fort Washington, Pa.

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for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

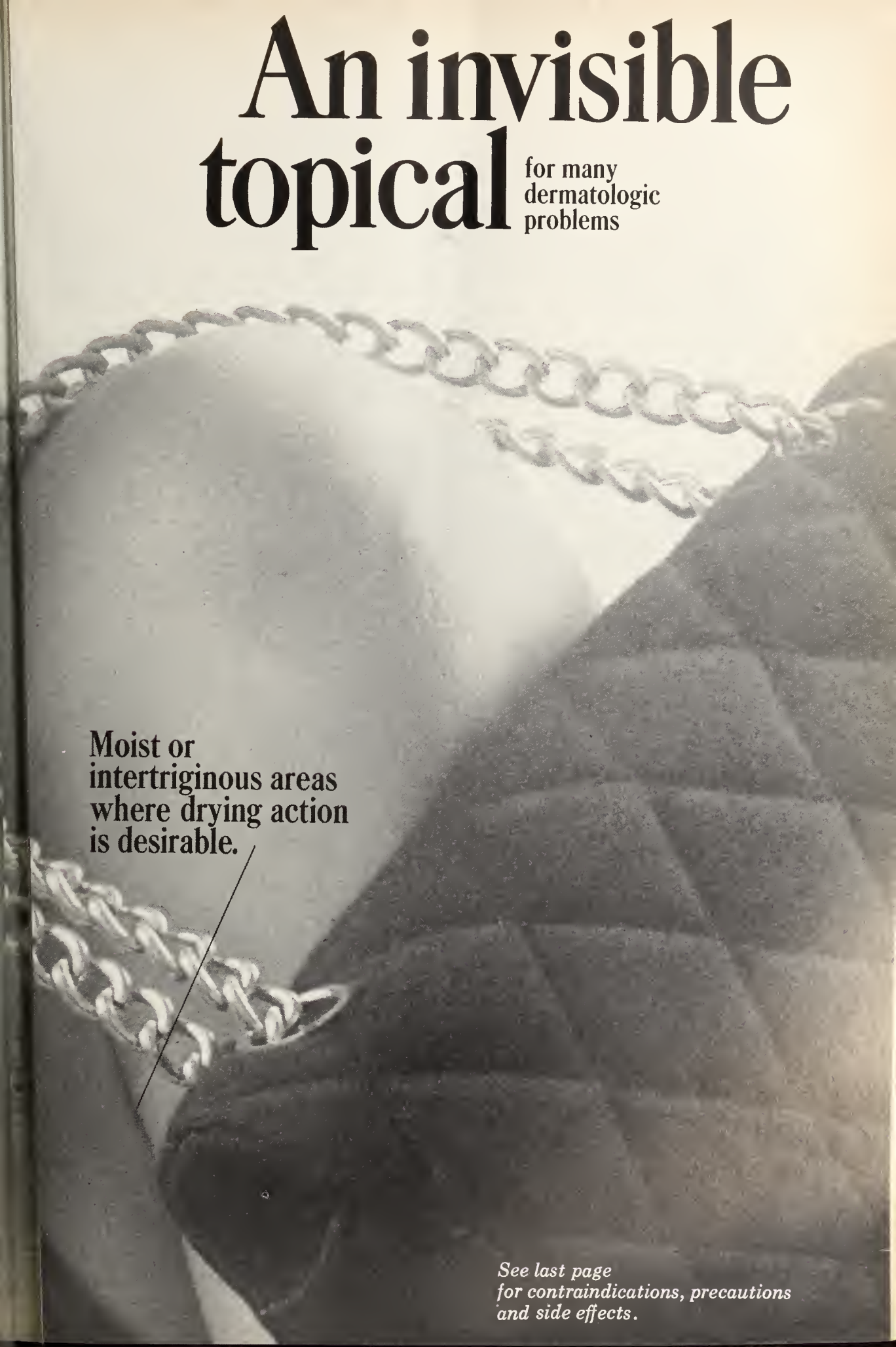
MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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Hairy sites where creams and ointments do not spread or penetrate readily.
Exposed areas where cosmetic considerations are important.

An invisible topical

for many dermatologic problems



See last page for contraindications, precautions and side effects.

Structurally unique topical steroid in propylene glycol vehicle produces rapid response in many dermatoses.

Synalar Solution produces rapid antiinflammatory, antipruritic action through its unique topical corticosteroid, fluocinolone acetonide. The propylene glycol vehicle provides additional benefits for therapy at problem sites where it is difficult to achieve contact between the lesion and medication—or where creams or ointments may make the lesions worse. Synalar Solution has proved particularly valuable in the symptomatic treatment of seborrheic dermatitis of the scalp, nasolabial folds, eyebrows, ears, and in flexural folds such as the axillae, inframammary, umbilical and anocrural areas. It has also been reported to achieve excellent results in the adjunctive management of atopic dermatitis, contact dermatitis, neurodermatitis, nummular eczema, psoriasis, and sweat retention syndromes in these problem sites.

Penetrates the hairy sites.

In many areas of the body, hair gets in the way of treating the underlying dermatitis. The propylene glycol vehicle of Synalar Solution permits penetration and dispersion at sites where creams and ointments do not readily penetrate. May be applied without matting of hair.

Ideal for moist or intertriginous areas.

Propylene glycol is strongly hygroscopic and is especially useful where sweat retention is a problem. Its low surface tension permits easy spreadability in difficult-to-treat body areas. A number of studies have also shown that propylene glycol has inherent antimicrobial activity.



Cosmetically acceptable on exposed areas.

The propylene glycol vehicle of Synalar Solution possesses many useful cosmetic properties. It is clear and greaseless, it is not sticky or messy, will not stain clothing or skin. For exposed areas of the body where cosmetic appeal is important, Synalar Solution can show nothing but results.

Economical—a little will go a long way.

Because of the properties of propylene glycol and the high potency of fluocinolone acetonide, a small quantity of Synalar Solution will go a long way. Also, the prescription price of a 20 cc. plastic squeeze bottle of Synalar Solution is surprisingly low. Thus, your patients obtain economy with the proved efficacy of a potent, truly effective topical corticosteroid.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components.

Precautions: In some patients with dry lesions, the solution may increase dryness, scaling, or itching. Application to denuded or fissured areas, such as genital or perianal sites, may produce a burning or stinging sensation. If this persists and dermatitis does not improve, discontinue medication. Although propylene glycol has antiseptic activity, there should be careful initial evaluation and follow-up of infected sites. Incomplete response or exacerbation of lesions may be due to true infection, which requires susceptibility testing and appropriate therapy. On the other hand, saprophytic or low grade infections may clear spontaneously under the influence of Synalar Solution alone. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time.

Side Effects: Side effects are not encountered ordinarily with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions.

Availability: Synalar (fluocinolone acetonide) Solution 0.01% in a propylene glycol vehicle with citric acid as preservative. 20 and 60 cc. plastic squeeze bottles. *Also available:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

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Synalar®
(fluocinolone acetonide)
Solution
0.01%

An invisible topical



Get-well gifts
go with convalescence...


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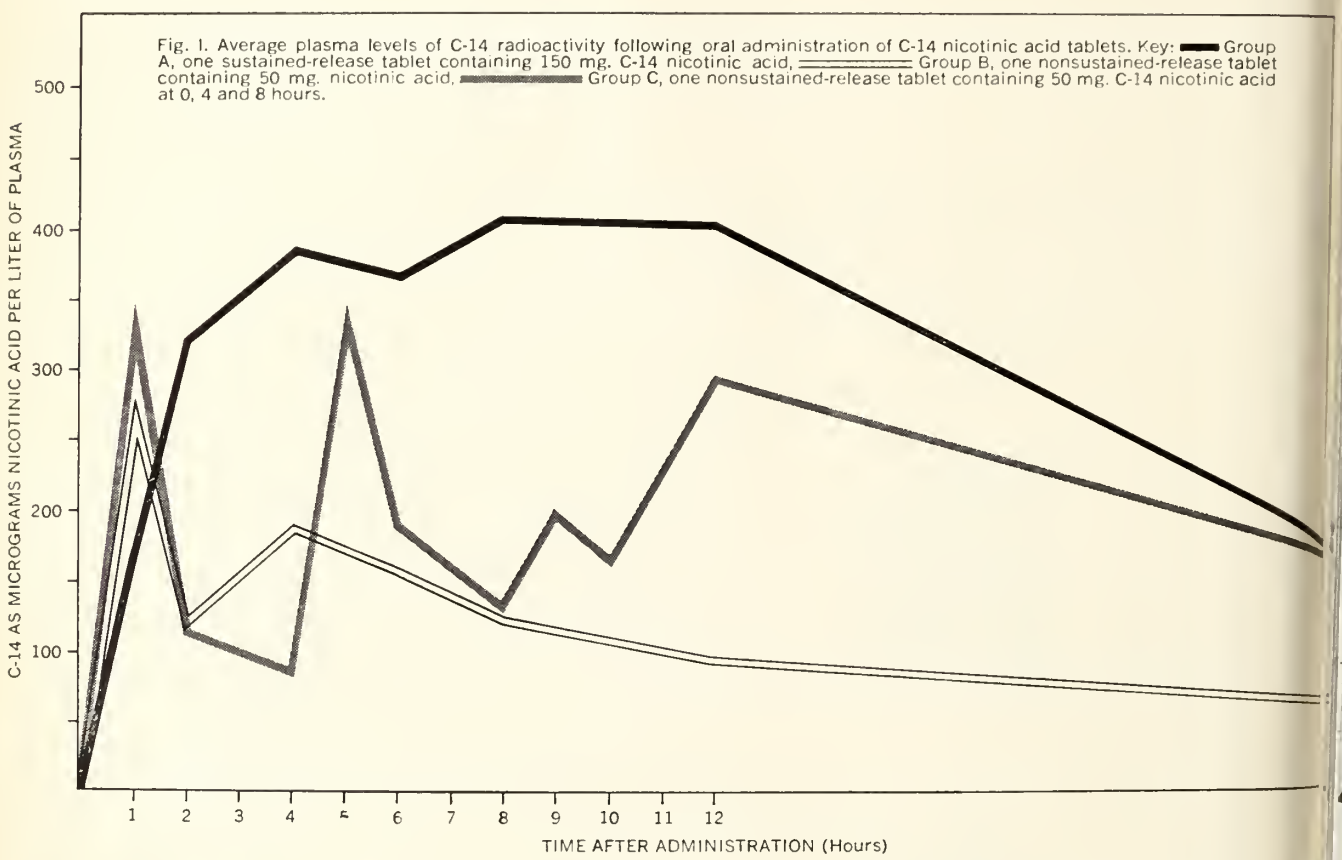
...and so does Surbex-T®



The potency of an injectable—
with therapeutic B-complex
and a full half gram of C

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Sustained circulatory, respirator and cerebral stimulation for th





(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation with a minimum amount (if any) of "flushing." Also cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ed and debilitated

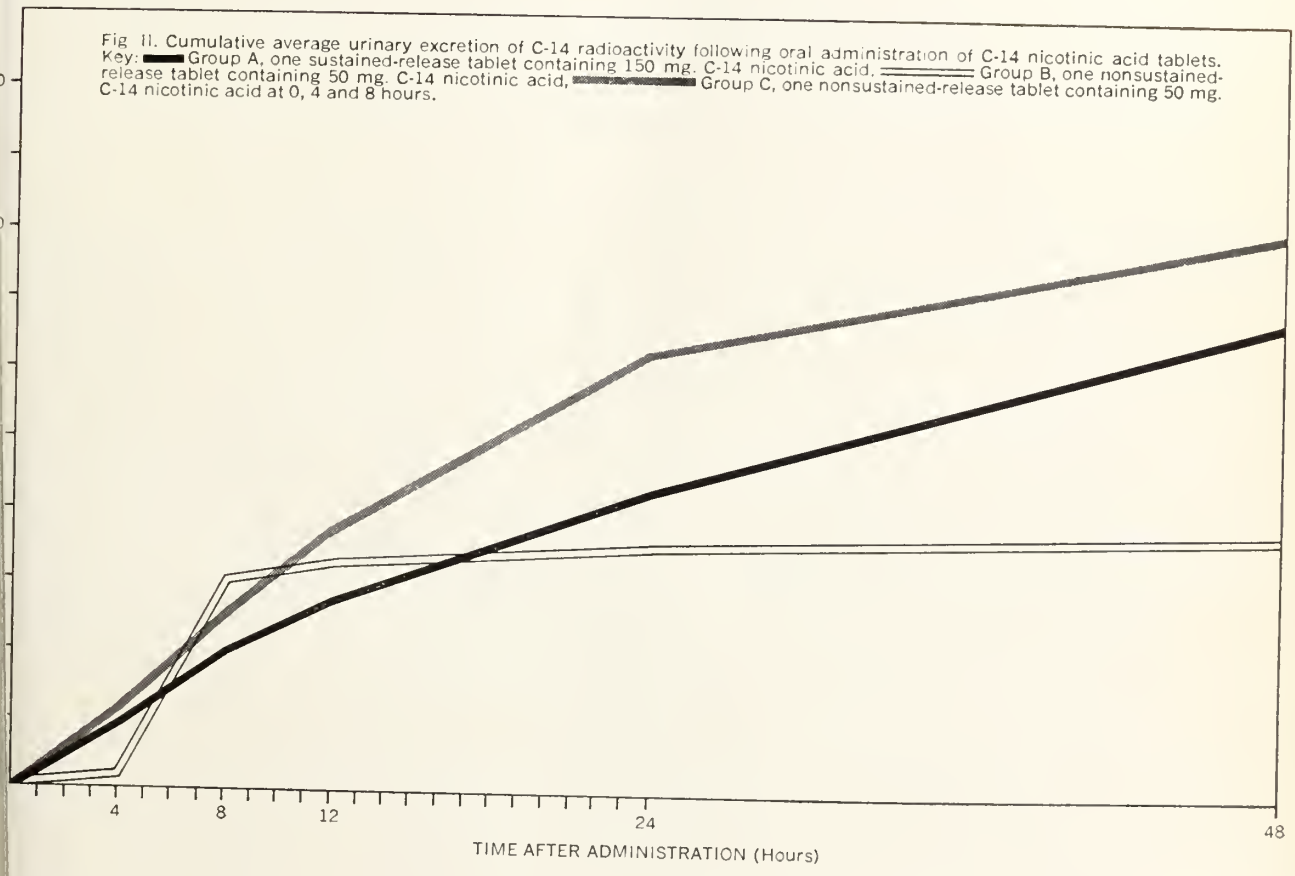


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

ss onfused and moody. Personal care, memory, notional stability, social attention improve. Fatigue, at and irritability are reduced.

A rescription for 100 tablets of Geroniazol TT will rm your patients to enjoy the benefits of time-ologed nicotinic acid/pentylenetetrazol therapy, an conomical price. Dosage is only one tablet every hours.

nt indications: There are no known contraindica-ns.

ecautions: Exercise caution when treating patients th low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

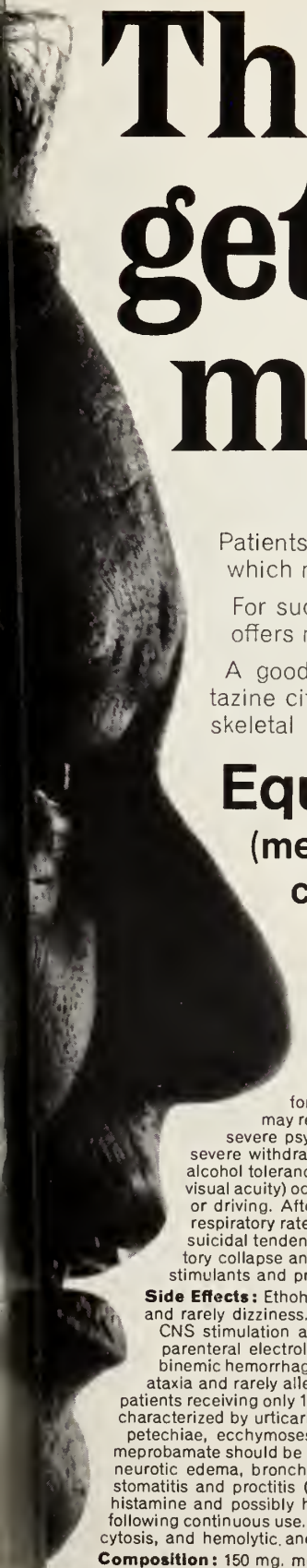
References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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. Subsidiary of Philips Electronics and
harmaceutical Industries Corp.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet





This pain is getting on my nerves.

Patients in pain often experience concomitant anxiety and tension, which may add to the burden of pain.

For such patients, you may want to prescribe a preparation that offers more than simple analgesia.

A good choice is often EQUAGESIC® (meprobamate and ethoheptazine citrate with aspirin). It helps relieve pain. And anxiety. And skeletal muscle spasm as related to pain or anxiety and tension.

Equagesic® TABLETS

(meprobamate and ethoheptazine citrate with aspirin)

Wyeth®

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with immediate gastric lavage and appropriate supportive therapy (CNS stimulants and pressor amines as indicated).

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

HIGHLAND HOSPITAL

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Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic need sof each patient may be realized.
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for topical antibiotic therapy with minimum risk of sensitization



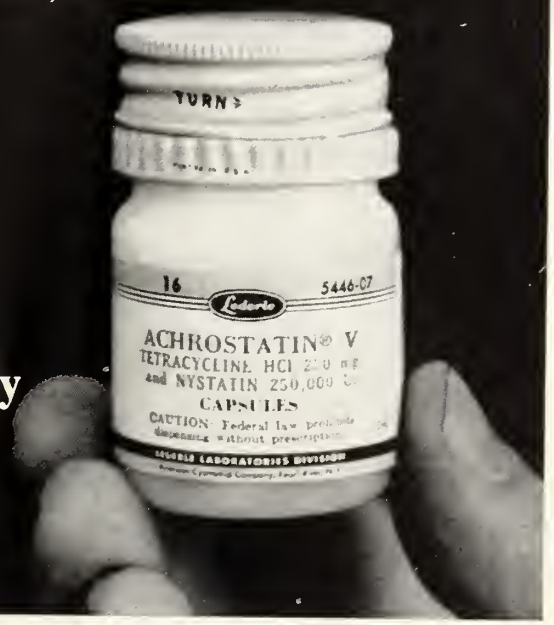
Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in ½ oz. and 1 oz. tubes.

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Tuckahoe, N.Y.

The lowest priced tetracycline-nystatin combination
ACHROSTATIN® V Capsules
Tetracycline HCl 250 mg /Nystatin 250,000 units



One of the 31 useful dosage forms in the ACHRO Family -the First Family of Tetracycline

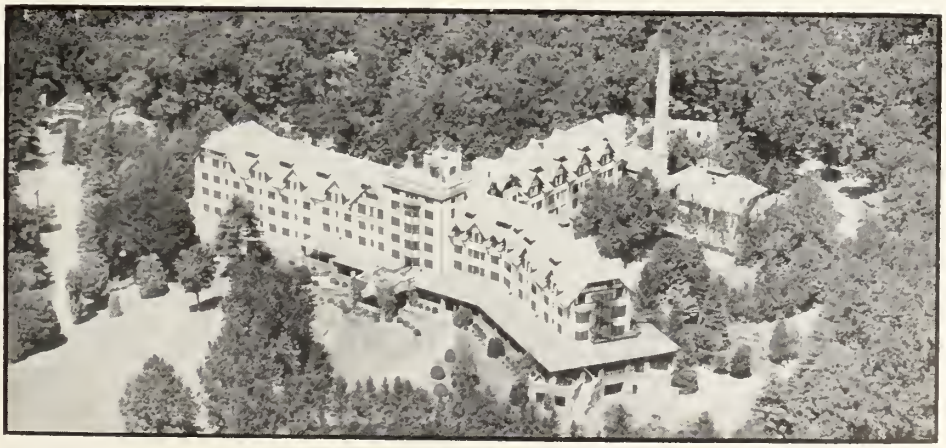
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...and so does Surbex-T®

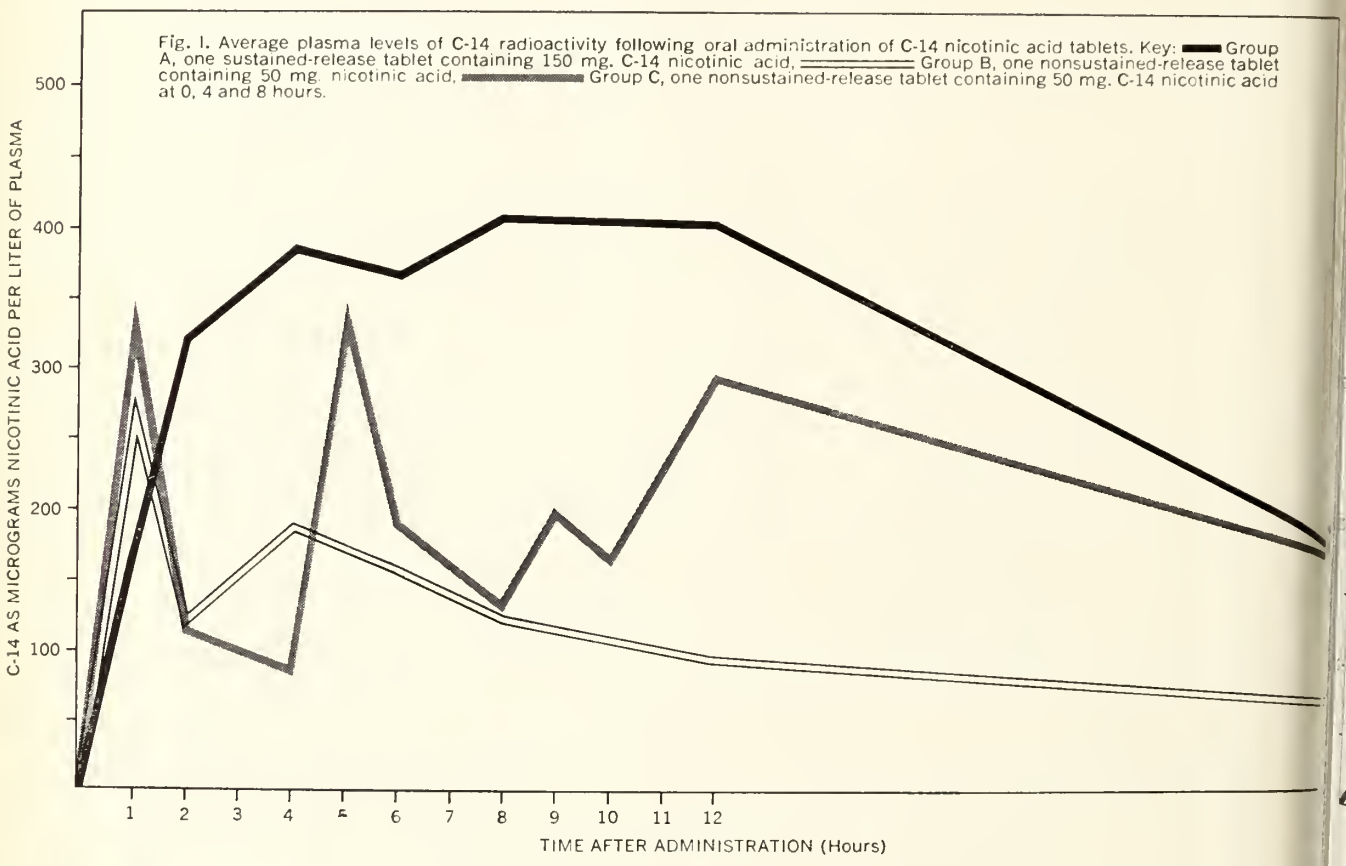


The potency of an injectable—
with therapeutic B-complex
and a full half gram of C

804440

Sustained circulatory, respirator and cerebral stimulation for th

Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.





(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be c tinuous on a daily dose of only one Geroniazol TT t let every 12 hours.

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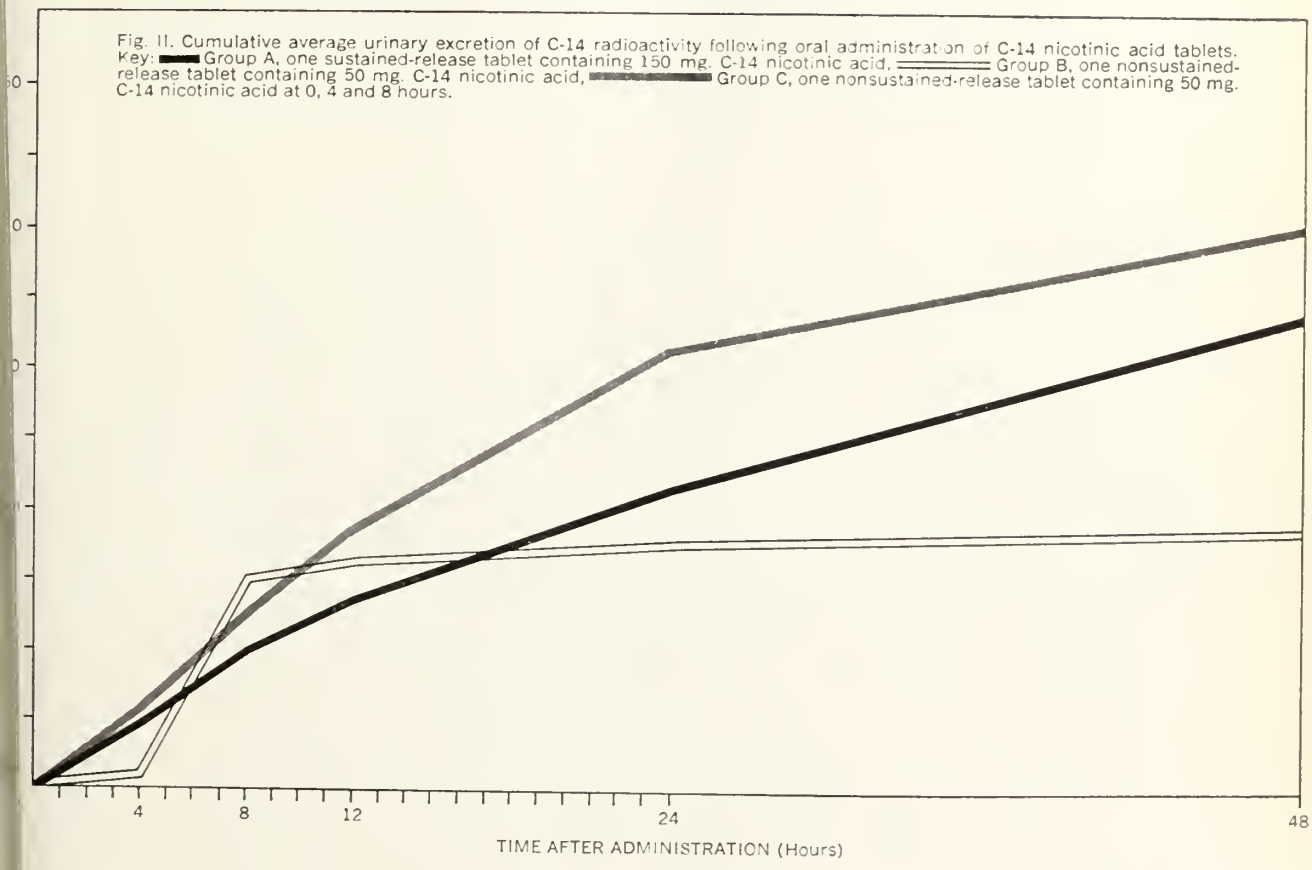


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

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A prescription for 100 tablets of Geroniazol TT will er it your patients to enjoy the benefits of time-ol nged nicotinic acid/pentylenetetrazol therapy, a economical price. Dosage is only one tablet every 2 hurs.

Co aindications: There are no known contraindica-on

Pr cautions: Exercise caution when treating patients th low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

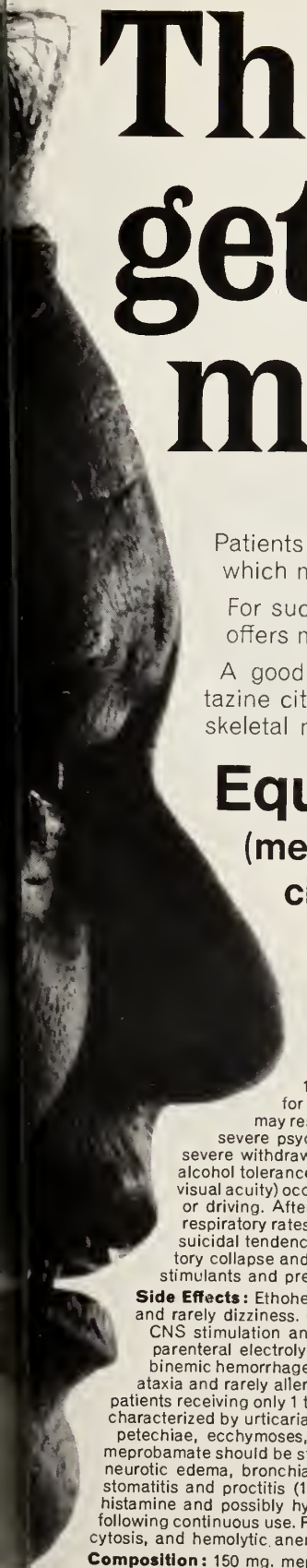
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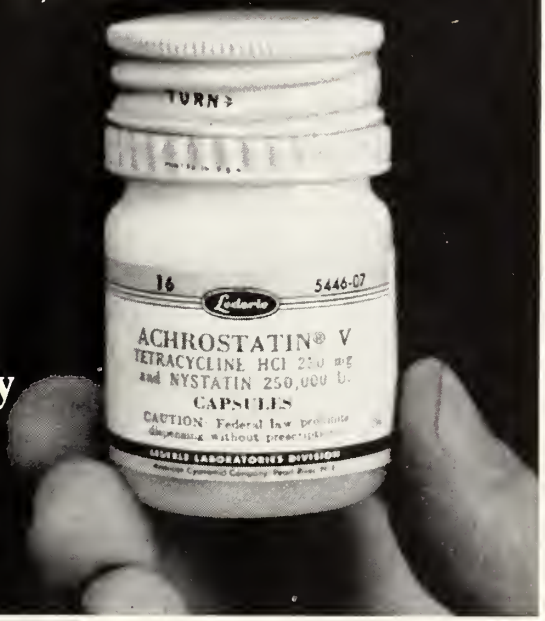
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The Journal
of the
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VOLUME 64 APRIL, 1968 NUMBER 4

CORONARY ARTERIOGRAPHY

GRADY H. HENDRIX, M.D.*
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The introduction of selective coronary arteriography by Sones in 1959 has led to profound changes in the clinical evaluation of patients with coronary artery disease as well as reopening of the surgical approach of vascular implantation procedures into the myocardium for relief of ischemic pain.

We would like to present our indications for coronary arteriography with the findings and disposition of the first 32 patients who underwent coronary arteriography at the Veterans Administration Hospital, Charleston, South Carolina.

Technique

The technique which has been employed in this hospital is basically the Sones' technique, which consists of passage of a tapered tip catheter into the central aorta through a right median antecubital cutdown site and a right brachial arteriotomy. Central aortic and left ventricular pressures are recorded, paying particular attention to the left ventricular end-diastolic pressure, the elevation of which usually signifies an elevated left ventricular end-diastolic volume and left ventricular failure. The right and left coronary arteries are then catheterized individually with the tip of the catheter in the orifice of the vessel and 6 to 10 ml of Renografin-60 injected. The arteriogram is recorded on 35 mm cine at 60 frames per second. Two injections with standard projections of the left anterior oblique at 45 degrees and the right anterior oblique at 20 degrees are performed and frequently some variation of these projections made if additional information appears to be necessary. Patients who are suspected of having a previous myocardial infarction undergo a left ventriculogram with the injection of 40 to 50 ml of Angioconray with a pressure injector in order to detect areas of noncontracting myocardium and ventricular aneurysm. The arteriotomy is closed with 6-0 Tevdek suture and the skin incision with 4-0 silk.

The arteriograms are also recorded on an Ampex Video Recorder during the procedure so that instant visualization may be obtained and other injections made as deemed necessary before the catheter is removed. The 35 mm film is processed on a Fischer Processal and viewed on a 35 mm film projector.

The right and left coronary artery anatomy is shown diagramatically in the left anterior oblique and right anterior oblique projections in Figure 1, 2, 3, and 4. Reproductions of cine frames of the normal and examples of diseased vessels are shown in Figures 5 to 12.

Other laboratory procedures routinely done on patients in whom we anticipate coronary arteriography are hematocrits, fasting blood sugar and two-hour postprandial blood sugar, uric acid, BUN.

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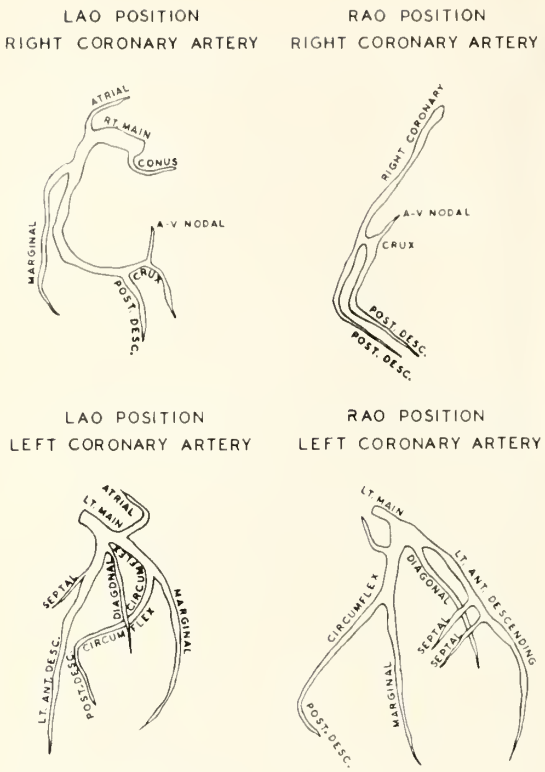


Figure 1 (upper left).
Right coronary artery in the left anterior oblique projection.
Figure 2 (upper right).
Right coronary artery in the right anterior oblique projection.
Figure 3 (lower left).
Left coronary artery in the left anterior oblique projection.
Figure 4 (lower right).
Left coronary artery in the right anterior oblique projection.

serum cholesterol, and PA and lateral view of the chest. A normal resting electrocardiogram is followed by a double Master exercise test of 40 steps, and if this is nondiagnostic, the patient is placed on a treadmill for maximum stress exercise. Exercise is continued until the heart rate is at least 130, and preferably 150. In most individuals without significant heart disease, this requires 15 to 30 minutes at three miles per hour on an incline of 15°.

Complications

Complications of this procedure have been few. The 32 patients who will be considered in this report have experienced no significant complications. In the experience of Sones, 84 instances of ventricular fibrillation occurred in his first 4200 patients. Ventricular asystole has

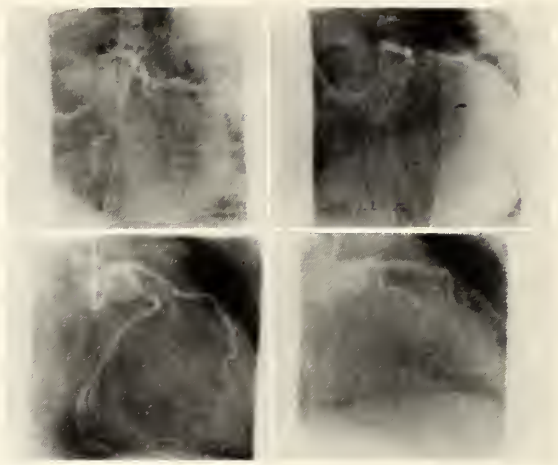


Figure 5 (upper left).
Normal right coronary artery in the left anterior oblique projection.
Figure 6 (upper right).
Severely diseased right coronary artery in the right anterior oblique projection with a major obstructive lesion at the junction of the proximal and middle 1/3 of the vessel.
Figure 7 (lower left).
Normal right coronary artery in the right anterior oblique projection.
Figure 8 (lower right).
Diseased right coronary artery in the right anterior oblique projection.

occurred. The overall mortality rate in Sones' experience is slightly less than one per one thousand patients who undergo the procedure, and this complication has occurred only in patients with severe, far advanced coronary disease. Acute myocardial infarction due to dissection has been reported. A rare patient is allergic to the contrast material. Brachial artery occlusion at the site of the arteriotomy occurs in 5 to 10 per cent, but this does not cause any particular problem as collaterals are sufficient to prevent any long-term complications.

Indications

The indications for coronary arteriography obviously could be any disease process affecting the coronary arterial system. The majority of patients undergoing this procedure fall into three categories: diagnostic, evaluation for coronary artery disease surgery, and patients with aortic valve disease being evaluated for surgery. (Table 1).

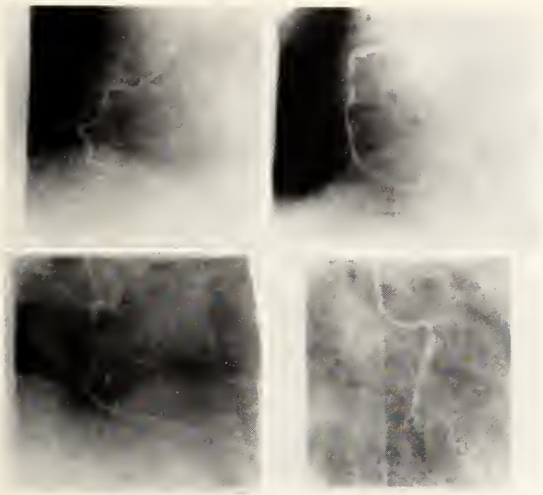


Figure 9 (upper left).
Normal left coronary artery in the left anterior oblique projection.
Figure 10 (upper right).
Diseased left coronary artery in the left anterior oblique projection with major obstructive lesions at the origin of the circumflex and anterior descending branches.
Figure 11 (lower left).
Normal left coronary artery in the right anterior oblique projection.
Figure 12 (lower right).
Diseased left coronary artery in the right anterior oblique projection with a major obstructive lesion of the anterior descending branch and total obstruction of the main branch of the circumflex.

Table 2 indicates the indications for coronary arteriography on the 32 patients in this series.

Arteriographic Findings and Disposition

Diagnostic—Eleven patients who underwent coronary arteriography for diagnostic purposes had disabling chest pain without other evidence of heart disease. All had normal coronary arteriograms. These patients were totally incapacitated from gainful employment and had been hospitalized on at least one occasion. Eight had been treated in the past for suspected myocardial infarction. All were taking nitroglycerin and long-acting coronary vasodilators, and two were on anticoagulants. There was no evidence of heart disease other than the history of chest pain. None had chest pain typical of angina pectoris. The resting electrocardiogram, Master exercise test, and maximal treadmill exercise testing revealed no electrocardiographic abnormality. The chest x-ray films were normal. Some of these patients appeared elated that there was no evidence of coronary disease, while others were inadequate people who quickly began focusing on another system, usually the gastrointestinal tract.

Two patients with electrocardiographic abnormalities and no other evidence of heart disease had normal coronary arteriograms. These electrocardiographic abnormalities represented right bundle branch block and non-specific ST-T wave changes.

Three patients underwent coronary arteriography who had marked cardio-

Indications for Coronary Arteriography

- Diagnosis
  - Coronary atherosclerosis
    - Atypical chest pain with normal ECG
    - Atypical ECG in asymptomatic patient
    - "Idiopathic" arrhythmias
    - "Idiopathic" cardiac enlargement
  - Unusual conditions of coronary vessels
    - Abnormal origin
    - Coronary arteriovenous fistula
    - Ostial stenosis
    - Coronary aneurysm
    - Myocardial tumors
  - Preoperative evaluation
    - Unusual distribution in congenital heart disease
    - Aortic valve disease with angina
    - Coronary artery surgery

Indications for Coronary Arteriography on 32 Patients, VA Hospital, Charleston, South Carolina

I. Diagnostic
  - A. Disabling chest pain without other evidence of heart disease—11
  - B. Abnormal "disabling" electrocardiogram without other evidence of heart disease—2
  - C. Heart disease not suggestive of coronary artery disease—5
    - (1) Cardiomegaly and congestive heart failure—3
    - (2) "Idiopathic" atrial fibrillation—2

II. Evaluation for coronary surgery—6

III. Evaluation of coronary arteries in patients with aortic valve disease—8
  - A. In order to determine degree of coronary disease versus degree of aortic valve disease in those who have chest pain suggestive of angina
  - B. Technical purposes as regards coronary perfusion

megaly and congestive heart failure and did not have angina, valvular disease, or hypertension. All were Negro males between 35 and 45 years of age. All had normal coronary arteriograms. The electrocardiogram in one patient showed left ventricular hypertrophy, while in the other two, there was low voltage and nonspecific ST-T wave changes. The first patient may represent hypertension which has subsided to normal levels with the development of severe heart failure, while the others presumably represent a myocardiopathy or possibly disease of the microcirculation.

Two patients with "idiopathic" atrial fibrillation and no other evidence of heart disease had normal right and left heart catheterization. One had a normal coronary arteriogram, while one had calcification of the left main coronary artery which was widely patent through the area of calcification (presumably medial calcification) but had rather severe intimal disease in the right coronary artery with no calcification. These two patients were heavy users of alcohol, and the latter was a heavy user of narcotics. It is of interest that the patient with the normal coronary arteriogram has had DC defibrillation six times and reversion with quinidine four times since 1962, but has never been able to sustain a normal sinus rhythm. The patient who had definite coronary disease in the right coronary artery has been defibrillated with 100 watt seconds on one occasion and has remained in normal sinus rhythm since that time.

Evaluation for Coronary Surgery

Coronary arteriography was performed on six patients who were felt to be candidates for coronary artery surgery. The available surgical procedures have gone through many transitions over the years but at present the most popular procedure and the one with which there has been the most recent experience is implantation of the internal mammary artery into the myocardium (revascularization procedure). The original procedure of this type is implantation of the left internal mammary pedicle into the anterolateral myocardium. This has been expanded by many groups now to include implantation of the right internal mammary pedicle into the posterior myocardium as an adjunct to this procedure. The direct approach for an isolated atheroma with a pericardial or vein patch graft is indicated only in those few patients who have an isolated atheroma with a high grade obstruction and no significant obstructive disease elsewhere in the vessel. This lesion is found in only 5 per cent of those patients with coronary disease undergoing arteriography.

Arteriographic Findings and Disposition

I. Underwent implantation of left internal mammary into anterolateral myocardium.
   (1) Total obstruction of left main circumflex and 50% obstruction of the anterior descending with a patent right coronary artery.
   (2) 80% obstruction of anterior descending with no significant obstruction of the circumflex and right coronary artery.
   (3) Total obstruction of anterior descending and 50% obstruction of circumflex with a patent right coronary artery.
   (4) 75% obstruction of anterior descending, 50% obstruction of circumflex, and slight narrowing of distal left main coronary artery, and a patent right coronary artery.

II. Operation deferred at this time because of major obstructive disease in right coronary artery.
   (1) 75% obstruction of a long segment of mid right coronary artery with a patent left coronary artery.
   (2) Three obstructive lesions of 30% to 50% throughout right coronary artery with a patent left coronary artery.

The ideal patient for a revascularization procedure is the patient with disabling angina without congestive heart failure and who has not had a previous myocardial infarction with a large area of scar in the left ventricular myocardium. The presence of congestive heart failure or a previous myocardial infarction is not a contraindication to the procedure as experience is gained, but these patients have a poor prognosis with or without surgery and carry a much higher

surgical risk. The six patients studied as potential surgical candidates were all incapacitated for gainful employment and lived a sedentary, uncomfortable existence on an adequate nonsurgical program. None was in heart failure or had suffered a known myocardial infarction. All had normal resting electrocardiograms with an unquestionably positive Master exercise test. Each of these patients had severe obstructive coronary artery disease and the lesions are summarized in Table 3.

We preferred to limit our initial surgical procedures to those patients who we felt could benefit from implantation only of the left internal mammary pedicle into the anterolateral myocardium. The two patients with severe disease of the right coronary artery are being followed at the present. The four patients who underwent implantation of the left internal mammary pedicle into the anterolateral myocardium had no problems of significance during the surgical procedure or postoperatively. The longest followup is three months which is too soon to evaluate any relief of angina. It is anticipated that a left internal mammary arteriogram will be done six months after the surgical procedure to observe for development of flow.

Eight Patients with Aortic Valve Disease and "Chest Pain" Who Underwent Coronary Arteriography

I. Underwent aortic valve replacement.
   A. Severe aortic insufficiency with normal coronary arteriogram.
   B. Severe aortic stenosis with normal coronary arteriogram.

II. Aortic valve replacement not recommended.
   A. Normal coronary arteriogram with inadequate degree of aortic disease to justify valve replacement.
   B. Severe "three vessel" coronary disease with moderate degree of aortic insufficiency.
   C. Normal coronary arteriogram with only 30 mm gradient across stenotic aortic valve.
   D. Normal coronary arteriogram with 50 mm gradient across aortic valve in Class II patient.
   E. Total obstruction of anterior descending but angina only a minor problem in patient with mild aortic stenosis.
   F. Severe "three vessel" coronary disease with mild degree of aortic stenosis.

Comparison of Group with Normal Coronary Arteriograms with Group with Definite Coronary Artery Disease Arteriographically

	Normal (22)	Coronary Disease (10)
Age	42	48
Race	13 white	10 white
	9 Negro	0 Negro
Family history	2 (9%)	2 (20%)
Smokes cigarettes	14 (64%)	7 (70%)
Consumes alcohol	11 (50%)	7 (70%)
Hematocrit	41 mm	46 mm
Diabetic	3 (14%)	2 (20%)
Fasting Blood Sugar	97 mg	90 mg
Uric acid	5.7 mg	6.5 mg
BUN/100 ml	14 mg	15 mg
Cholesterol/100 ml	207 mg	258 mg
LV end diastolic pressure (excluding left ventricular failure from other causes)	9	11

Evaluation of Patients with Aortic Valve Disease

There were eight patients in this category who had physical findings consistent with aortic valve disease and had chest pain of some description. Two of these patients underwent aortic valve replacement, and in both of these the coronary arteries appeared normal. It is of interest that neither has had chest pain since the aortic valve replacement. One had nonspecific chest pain while the other had severe sustained typical angina as seen in aortic stenosis. Six of these patients did not undergo aortic valve or coronary artery surgery. The findings in this group are summarized in Table 4.

In addition to evaluating the degree of coronary disease as contrasted to the degree of aortic valve disease as a cause of angina, it is very important to know the status of the coronary arteries for perfusion purposes in patients undergoing aortic valve replacement. If the left coronary artery is essentially free of obstructive disease, it can be perfused alone, which makes it technically easier for the

surgeon, whereas in the patient with a significantly diseased left coronary artery, the right coronary artery must also be perfused.

Other History and Laboratory Correlations

Table 5 depicts a number of facts in the 22 patients who had normal coronary arteriograms, some of whom did have other forms of cardiac disease, and in 10 patients who had unequivocal coronary disease by arteriography.

It is particularly interesting that the hematocrit reading, uric acid, and serum cholesterol are significantly higher in those patients with definite coronary disease as opposed to those without coronary disease.

Summary

1. Coronary arteriography is helpful and justified in patients who have chest pain which is physically, emotionally, or financially crippling and in whom the diagnosis is not clear.

2. Patients with disabling angina unresponsive to other measures should have coronary arteriography and surgery offered to those select ones in whom it appears indicated.

3. Coronary arteriography is essential in the evaluation of adults with aortic valve disease.

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The Medical Data Screen. An Adjunct for the Diagnosis of 100 Common Diseases. K. Brodman, L. S. Goldstein. Arch Environ Health 14: 821-826 (June) 1967.

The Medical Data Screen (MDS) aids the physician in the diagnosis of 100 common diseases. It uses a questionnaire to collect the patient's history and a computer to analyze the reported symptoms. In this reported study, the method identified over 70% of these diseases in employees of an insurance firm; it has been shown previously to have identified like proportions among private patients of internists and of a general practitioner. The MDS method is essentially a laboratory procedure that brings to the medical profession a type and volume of information about the whole patient which is not otherwise readily available. Some of the advantages of the method include the wide applicability of the comprehensive information it develops, the relevance of this information to the medical and psychiatric status of patients, the high validity of the information, the ease with which it is obtained, and the speed of the method.

THE PHYSICIAN AND THE NATIONAL LIBRARY OF MEDICINE

LEONARD KAREL, Ph.D.*

Introduction

When the National Library of Medicine was established in 1836 as the Library of the Surgeon General's Office (U. S. Army), the Surgeon General was authorized to spend $150 for medical literature. Today the Library, located at Bethesda, Maryland, near Washington, in a five-story contemporary building which it has occupied since 1962, is regarded as the world's largest in biomedicine. Among its holdings of 1,300,000 items, in seventy languages, are 315,000 monographs; 310,000 bound journal volumes; 285,000 theses; 168,000 pamphlets; and 4,500 reels of microfilm.

The Library provides 175,000 interlibrary loans annually, and of these 160,000 are photocopies of journal articles not available at the requesting local library. Reference personnel answer 10,000 personal inquiries, 10,000 phone inquiries, and 2,000 mail inquiries each year. Requests for 100,000 library items are made by 25,000 to 30,000 persons who use the reading room each year.

The Library is a major publisher of biomedical bibliographies; e.g., *Index Medicus, Cumulated Index Medicus, Bibliography of Medical Reviews, Biomedical Serials 1950-1960, Bibliography of the History of Medicine*, and *NLM Current Catalog*. Among other Library publications are Medical *Subject Headings*, the thesaurus for *Index Medicus; List of Journals Indexed in Index Medicus; National Library of Medicine Classification;* and *Russian Drug Index*.

The National Library of Medicine

Known for 86 years as the Library of the Surgeon General's Office, the Library was developed as both a national and an international resource by Dr. John Shaw Billings, Librarian from 1865 to 1895. In 1922, it was renamed the Army Medical Library and in 1952 was again renamed, the Armed Forces Medical Library. In 1956, under legislation introduced by Senators Lister Hill of Alabama and John F. Kennedy of Massachusetts, it was transferred to the Public Health Service, Department of Health, Education and Welfare, and named the National Library of Medicine.

The Library was established by the Congress of the United States to assist in the advancement of medical and medically related sciences by the collection, dissemination, and exchange of scientific and other information important to the progress of medicine and of public health.

Towards fulfillment of its mission the Library (1) acquires and preserves books, periodicals, films, prints, and other library materials pertinent to medicine; (2) organizes these materials by appropriate cataloging, indexing, and bibliographic listings; (3) publishes and disseminates catalogs, indexes, and bibliographies; (4) distributes materials through interlibrary loans, photographic, or other copying procedures; (5) provides reference and research assistance; and (6) encourages, promotes, and supports activities to further the progress of medicine and of public health by strengthening existing services and developing new ones.

The Congressional mandate was strengthened recently when, on October 22, 1965, President Johnson signed the Medical Library Assistance Act, Public Law 89-291 of the 89th Congress. In sign-

*Special Assistant to the Associate Director for Intramural Programs, National Library of Medicine.

ing the Act, the President commented that the Nation's medical libraries are a vital link between medical education, practice, and research, and that too little attention has been given to the problem of collecting and sharing scientific knowledge.

The Medical Library Assistance Act is an amendment to the legislation authorizing the establishment of the Library. The Act permits assistance to medical libraries for construction and renovation, for acquisition and for improvement of resources, for training of medical librarians and other information specialists, for preparation of publications, for research in medical library science, and for the development of regional medical libraries. The Act also authorizes traineeships, fellowships, and special scientific projects by individuals or institutions.

Administration of the Act on behalf of the Library is done by the Library's Extramural Programs.

The Library today serves as the principal national focus of resources and programs for bettering communication in medicine and the health sciences and is encouraging the development of the existing system of medical libraries into a national medical information network. On July 1, 1967, the Library acquired the Public Health Service Audio-visual Facility in Atlanta, Georgia. This facility, renamed the National Medical Audiovisual Center, will coordinate a national program in biomedical audio-visuals.

Access to the collection is facilitated through an interlibrary loan program. When libraries request loans through medical library channels, the National Library of Medicine lends books within the United States and, worldwide, provides single copies of articles from journals which the requesting libraries do not possess and which are not available locally. There is no charge for this service or for other services except special photography.

The Library collects materials comprehensively in some forty biomedical subject categories and selectively in many related categories. The collection, in which are over 19,000 serial titles, is increased annually by 95,000-100,000 items. It is estimated that the Library now stores 360 million pages, of which 85 million are pre-1870, and that at least 10 million more are being acquired annually.

Its History of Medicine Division alone has between 60,000 and 65,000 printed works bearing publication dates earlier than 1801. Included in the collection are: an Arabic manuscript of the year 1094 on gastrointestinal disease; a collection of palm-leaf manuscripts from Ceylon, in Singhalese; works of Hippocrates and Galen; and letters written by George Washington, by Benjamin Rush, and by Florence Nightingale. Holdings also include 535 incunabula; 33,000 16th, 17th, and 18th century monographs; 1,600 17th century theses and pamphlets; 2,000 early American medical works; and an estimated 60,000 prints and photographs.

Computerized Library Services

Efforts of conscientious, busy practitioners to achieve and to maintain awareness of the most recent medical discoveries and applications have often led to many and continuing frustrations. The increase in the volume of medical literature and in the number of users has not been paralleled by equivalent growth of medical libraries and of information storage and retrieval methods and facilities adequate to catalog, index, store, and retrieve literature for use of physicians, scientists, and others. Therefore, the Library adopted computerization as a means of assisting, supplementing, and complementing traditional approaches to management of published biomedical literature and pioneered in the use of computers for storage and retrieval of bibliographic information.

In January 1964, a computer-based information storage and retrieval system

called MEDLARS (Medical Literature Analysis and Retrieval System) became operational at the Library.

MEDLARS joins the professional experience of trained literature analysts and searchers with the processing capabilities of a high-speed electronic computer. The literature analysts, using terms selected from a thesaurus of approximately 7,000 terms, *Medical Subject Headings* (Part II of the January issue of *Index Medicus*), characterize each article by assigning to it a number of subject headings or descriptors. Indexed articles are entered into the computer and transferred to magnetic tapes for storage, and for rapid retrieval. Currently, MEDLARS contains over 550,000 citations to biomedical journal articles published since January 1964. About 55% of these are in English.

MEDLARS has improved the quality of the Library's monthly *Index Medicus* and has substantially reduced the time required for the production of other Library bibliographies.

Index Medicus, a comprehensive, monthly subject-author index, now incorporates 180,000 articles annually from nearly 2,300 of the world's biomedical journals. At the close of each calendar year, MEDLARS compiles *Cumulated Index Medicus*, a complete listing, with cross-references, of the citations which were printed in that year's issues of *Index Medicus*. An abridged edition of *Index Medicus* for the personal use of physicians is being planned in cooperation with the American Medical Association.

(MEDLARS does not now include monographs, symposia, conferences, congresses, and proceedings not published in journals.)

The journals indexed in *Index Medicus* (approximately 2,300) are selected with the advice of an extramural committee whose decisions are made largely on the quality of the journal under consideration; however, care is taken to assure subject balance. Discussions of journals are based on prior knowledge of the journal and on inspection of the journal by committe representatives. In addition, the committee is assisted by advice from subject specialists. Comprising the present committee are physicians and scientists, medical editors ,and medical librarians.

MEDLARS makes possible rapid machine searches of biomedical journal literature to obtain answers to reference questions that cannot be handled expeditiously by manual searches. Machine searches which provide citations to medical literature in specific areas of interest are called "demand bibliographies".

MEDLARS is responding to more than 400 highly specific computer search requests monthly. These requests are coming chiefly from physicians, teachers, and researchers in medical schools, hospitals, universities, and Federal research laboratories.

In addition to demand bibliographies, the Library collaborates with professional societies and other professional organizations in the preparation of "recurring bibliographies" — formally published, widely distributed bibliographies in specialized subject areas of broad interest.

These recurring bibliographies are *Artifical Kidney Bibliography; Bibliography of Medical Education; Cerebrovascular Bibliography; Fibrinolysis, Thrombolysis, and Blood Clotting; Index of Rheumatology; Index to Dental Literature;* and *International Nursing Index.*

Although the Library supplies the sponsoring organization with citations retrieved periodically from MEDLARS on film ready for offset printing, publishing and distributing the bibliography—on a non-profit basis—are the responsibility of the sponsoring organization.

At frequent intervals, generally monthly, the Library selects from its demand bibliographies a few considered to be of general interest. Announcements of the

availability of these bibliographies, called *NLM Literature Searches*, appear in *Journal of the American Medical Association, Public Health Reports, Journal of the American Dental Association, NLM News*, and other publications including state journals. There is no charge for these *Searches*. Clinicians, educators, and researchers interested in receiving notices on new *NLM Literature Searches* may write to the Office of Assistant to the Director, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014.

To enhance effectiveness of MEDLARS, the Library has provided its computer tapes and programs to university-affiliated centers which can make computer-generated demand bibliographies available locally or regionally to qualified practitioners, educators, and researchers. Decentralized MEDLARS stations are now in operation or will soon be in operation at Harvard University, the University of Alabama, the University of California at Los Angeles, the University of Colorado, and the University of Michigan. Others are being considered, and as regional libraries, authorized by the Medical Library Assistance Act, are identified, they, too, will be provided with a MEDLARS search capability.

Two MEDLARS centers are in operation outside the United States: In the United Kingdom under a cooperative arrangement between the University of Newcastle-upon-Tyne and the National Lending Library for Science and Technology at Boston Spa, Yorkshire, demand bibliographies are provided by the Lending Library. In Sweden, literature references taken from MEDLARS tapes are provided by the Karolinska Institute in Stockholm.

Physicians wishing to obtain demand bibliographies are encouraged to seek the advice of local medical librarians on suitability of the inquiries and on the preparation of requests which will elicit the information sought. The use of *Medical Subject Headings, Guide to MEDLARS Services*, and an expression of specific interests will help avoid retrieval of irrelevant citations. Thus, a request specifying animal experiments will help to insure that citations on human studies will not appear in the bibliography; similarly, specifying a single age group will obviate retrieval on all age groups.

Citations may be arranged alphabetically by senior author, by journal title, by language, by subject headings, and by year of publication, and each citation can be printed with the descriptors assigned to it by its indexer. Although the computer can print bibliographies on 8½" x 11" paper or on 3" x 5" cards, usually the printout is provided on the less costly paper.

The elapsed time between receipt of a request and mailing of a bibliography is a function of the volume of searches requested. At present, elapsed time is about three weeks.

It is important to note that MEDLARS does not produce abstracts. It is also important to note that MEDLARS services are not provided for searches which can be conveniently and readily accomplished by the use of published indexes, handbooks, and other reference materials.

Demand Bibliography Requests from South Carolina

During the period July 1966-June 1967, inclusive, the National Library of Medicine responded to seven demand bibliography requests from biomedical personnel in South Carolina.

Examples of these requests are Diphtheria Control; Training, Motor Skills, and Laterality in Orthopedics; and Electron Microscopy of Neurons.

The distribution of the seven requests was:

Medical College of South Carolina	4
Federal	2
Other	1
Total	7

Summary

The National Library of Medicine, now the world's largest biomedical library, was established by Congress to further the advancement of medical and medically related sciences by the collection, dissemination, and exchange of scientific and other information important to progress of medicine and of public health. It has become an international as well as a national resource for publications and other items relevant to medical communication, and renders service on a world-wide basis.

In January 1964, a computer-oriented information storage and retrieval system called MEDLARS (Medical Literature Analysis and Retrieval System) became operational at the Library. This system has improved the quality of *Index Medicus* and other Library-associated publications and has substantially reduced the time required for preparation and publication of such publications.

The MEDLARS store of biomedical journal articles published since January 1964 now excedes 550,000 and is growing at an annual rate of 180,000 articles, taken from nearly 2,300 journals. Requests for computer searches come chiefly from physicians, teachers, and scientists in medical schools, hospitals, universities, and Federal research laboratories.

Aortic Arch Interruption: Treatment with Pulmonary Artery Banding—Hairston, P., Webb, H., Lee, W. H., Jr. (Charleston) J Thorac Cardiov Surg 54:60-64 (July) 1967.

This paper reports an unusual cardiac malformation of aortic arch interruption, ventricular septal defect, and patent ductus arteriosus encountered in an 11 month old male child. The distinctive anatomic feature of the anomaly is the lack of communication between the proximal and distal aortic arch, the latter arising from a patent ductus arteriosus. Pertinent hemodynamic and angiographic data are presented. The patient was managed by individual banding of the right and left pulmonary arteries. This palliative maneuver was performed in order to prevent the development of irreversible changes in the pulmonary vascular bed secondary to the delivery by the right ventricle of excessive blood under high pressure. The procedure was well tolerated, and represents the first reported successful management of a case of this nature. Complete correction of the complex anomaly is anticipated when the child attains greater size.

CLINICAL CONFERENCE

Shriners Hospital for Crippled Children,
Greenville, S. C.

Unusual Problem of Lower Extremity Length Discrepancy

This 9 yr. old girl is admitted with a diagnosis of left femoral hypoplasia in addition to tibia-fibula hypoplasia, which resulted in gradual loss in length of this extremity compared to the opposite side, as she has grown older. She had rather marked delay in ossification of the neck and trochanteric region of her femur, but through the years, with protection, this area gradually ossified so that she now has a very mild coxa vara. The head of the femur has developed and there is an excellent acetabulum with good hip motion. No other anomalies have been noted. Her general health has been good, but at this time she is 9 yrs. of age with a leg length discrepancy of 4-5/16 inches. She has a good ankle joint with slight tightness in her posterior structures so that she has mild equinus of about 10°. There has been a graded increase in discrepancy through the years that she has been followed so that by yearly leg length and bone age studies, it has been noted that she has been losing at the rate of approximately 3/16 inch per year. Up until this time she has been treated with a weight-bearing brace with a long extension to balance her pelvis, and she has been able to get by very well with this, although it is quite unsightly and would not be acceptable for permanent use throughout life. There has been no evidence of such deformities or other congenital abnormalities in the family.

Physical Examination: Within normal limits except for this congenital anomaly of her right lower extremity. As has been mentioned, she has excellent range of motion in her right hip with good motor control. She does have a little tightness in her knee. She can extend the knee to 175°, and can flex the knee about 45°. She has good plantar flexion of her foot, the foot is stable, as is the ankle, but with a 10° tightness in her posterior structures, with mild equinus. It has been suggested, in the past, that this child have a deletion of the foot and leg with fusion of the knee joint, thereby converting to an above-knee amputee. She may then be fitted with an above-knee prosthesis. She would be able to get about well with good function and cosmesis.

This has been the experience not only here, but of many childrens' centers in the past, and such a procedure will certainly give her a much better cosmetic appearance for school and future life. She is being presented today because of this severe discrepancy problem. It should be noted that her mother and father are both of short stature and that this child's predicted height at maturity will be approximately 5 ft. 3 inches, calculated on her percentile and considering the normal leg.

Question—Dr. Meyer: What will final total discrepancy be at termination of her growth period if she is left just as she is now, calculating on the basis of her previous leg length and bone age x-ray films?

Answer—Dr. Stephens: This child has approximately 5 yrs. left to grow and she is losing at the rate of approximately 3/16 inch a year, so this will be approximately 15/16 inch further loss, which added to her present 4-5/16 inches, one would indicate that her final discrepancy would be approximately 5 and 14/16 inches.

Question—Dr. Riddle: Does this child have good sensation in her foot?

Answer—Dr. Stephens: The sensory examination of her foot is perfectly normal.

Question—Dr. Stelling: Dr. Kent, what alternatives are present in this case as far as treatment is concerned?

Answer—Dr. Kent: 1. One could leave this patient as she is and fit her with a prosthesis with the foot in marked equinus, leaving the knee level as it is, and putting a conventional shoe on the end of the prosthesis, but this would be a rather unsightly prosthetic appliance, particularly for a woman. Her knee heights would be considerably different, which would not make as much difference as most of the other problems. She would have to walk in equinus for the rest of her life in the appliance. She would have the problems of appliance fittings for the rest of her life, which would be a little different from those of a conventional prosthesis, in that this would be more difficult to fit and would have to be made up to her specifications. This would be certainly unsightly and not applicable for a nice young lady, and this girl is a rather pretty girl. She would have the advantage of having a foot that had normal sensation that she could use, although the discrepancy was tremendous, so that she might get about in the confines of her home, or be able to get up at night, if she so desired, without any appliances.

2. A second alternative is that which has already been indicated on her admission, and that is that this child have growth arrest at all of the epiphyses of her knee on the short side and by an amputation of the foot and ankle and convert this into a stable stump from the hip to the ankle, and as she grows away on the opposite side we can convert this, therefore, to an above-knee stump. When she has completed her growth, we could strive for the ankle on the short side to be somewhat above the knee and then fit her with a standard weight bearing type of prosthesis. The knee will then be hidden under her dress and this would give her, certainly, a much more cosmetic appliance whereby she could use standard shoes and she should have a stable gait, since she has a good hip. This is the method we have used in the past for treating such serious discrepancies and this would give her the best result, as we have looked at this up until now.

Question—Dr. Meyer: What about the methods of decreasing height on the opposite extremity, such as an epiphysiodesis on the long side, or limb shortening on the long side, and take care of her discrepancy this way?

Answer—Dr. Kent: It has been predicted that her total height at termination of growth would be about 5 ft. 3 inches, and she will have a discrepancy of about 6 inches, and this would be just too much to take out or to lose in the long side. She would be a rather grotesque dwarf with short extremities and I do not believe this would be a very adequate solution to this problem.

Question—Dr. Stelling: What about leg lengthening on the short side?

Answer—Dr. O'Neil: Leg lengthening procedures in the past have been performed, and there is quite a good bit of material in the literature concerning this. However, the risks are rather great. There have been many instances of nonunion. The procedures are usually accompanied by a great deal of pain. In some instances there have been rather marked vascular changes, even with loss of the foot on the involved extremity. Nerve stretch difficulties are frequent and until recently this has been deemed a rather poor method of handling leg length discrepancies and has been abandoned by most authorities.

Dr. Riddle: Recently, Anderson in Scotland has reported on quite a number of leg lengthening procedures using the old Abbott method, but he has been doing a closed osteotomy and has shown rather excellent results without having some of

the previous difficulties that have been reported in the past, such as Dr. O'Neil just outlined.

Dr. Stelling: That is true. I think that he has now had some 300 cases with excellent results and he has done these in children under 12, or at least advocated that they be done under the age of 12. Dr. Coleman at the Shriners Hospital in Salt Lake City, has recently reported some 25 or 30 cases of tibial lengthenings using the Anderson method, with excellent results. He states that the child is not uncomfortable during the leg lengthening procedure, and in no instance in children under 12 has he had any serious complications such as have been reported before, and all have resulted in union. We have performed this operation in this hospital recently, with about the same results. It is mandatory that one stick very close to the method described by Dr. Anderson. We are using the Abbott leg lengthening apparatus which is diagrammed here. The apparatus is stainless steel and is sterilized with the other instruments and present at the operating table. As far as the procedure is concerned, a small vertical incision is made about 3 inches above the lateral malleolus of the short side. The periosteum is elevated over the fibula and a 7/64 hole is drilled transversely through the fibula and tibia at this point. This is performed well above the tibial epiphyseal plate; 7/64 inch screw is measured and placed through the fibula and into the tibia through both cortices of the tibia, locking the fibula to the tibia so that the entire ankle mortice moves together as the lengthening occurs. A 1 inch segment of fibula is then removed about an inch above the screw, and this wound is closed. The lengthening apparatus is then placed alongside the leg, moving the pinholder, brackets and rods to within about a half inch of the skin of the limb itself. The skin is then manually moved toward the middle of the leg and four large Steinmann pins are



driven through the apparatus and into the tibia, locking the fibula to the tibia to place the pins through the apparatus first, then drill; otherwise, the pins will not be aligned to fit the apparatus. The upper pin is about 1 inch below the proximal tibial epiphysis.

The distance between the two upper pins is controlled by the pinholders and apparatus. The site of osteotomy should be about 1 inch below the lower of the two upper pins. The lower pins should be about 1 inch below the osteotomy. The distance between the lower pins is also controlled by drilling through the apparatus. The apparatus is then tightened up and the pinholders are tightened so that they will not tilt or slide in relation to the threaded rods. The apparatus is then removed. A small drill hole is made at the predetermined osteotomy site over the anterior tibia through the skin. Using this one drill hole, just moving the skin, multiple drill holes are then made circumferentially at this point through the tibia. This should be done so that the periosteum of the tibia remains more or less intact, but the bone is weakened, the periosteum being interrupted only by a few small holes. The tibia is then fractured at this weak point either by a karate blow with the heel of the hand, or just by manual breaking. The apparatus is then reapplied to the four pins, making sure that the pinholders are in the exact relationship they were placed prior to the osteotomy. The fracture will then be aligned perfectly by the

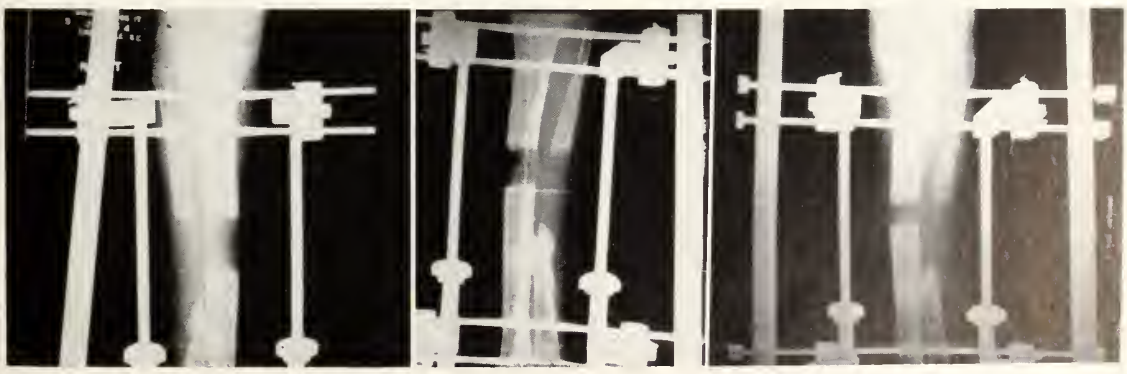
apparatus, since this is the way it was applied before any fracture had occurred. A plaster cast is then applied over the foot in the neutral position, incorporating the lower two pins. This, of course, is all done with the patient under general anesthesia. A day or two following the surgical procedure, when the patient is stable, the leg lengthening is begun. The threads on the rods are calculated so that one full turn of the turn-nut allows for 1 16 inch of gain so that the limb is turned one revolution per day and this sometimes produces just a small amount of pain, not enough usually to require medication. If there is any pain, one should possibly turn the nut only a half turn, or a day may go by without turning at all. In this way, after approximately 30 to 40 days, one can gain 2 inches of length. As length is gained, callus can be seen to appear in the periosteal tube by x-ray. Anderson states that he follows the leg lengthening by x-ray and does turn, more or less, as he sees the callus appear. So far, we have not adhered, particularly, to this rule, but we have not tried to exceed 2 inches in length. Anderson has obtained, in some instances, more than this, and I understand Coleman has in a few instances. When we obtain our 2 inches, we have applied a long leg plaster with the knee in extension, incorporating the four pins and then remove the apparatus. The patient is then followed at eight week intervals with x-rays until the bone seems to be mature and seems to be quite solid. We have, as a rule, placed these children in a

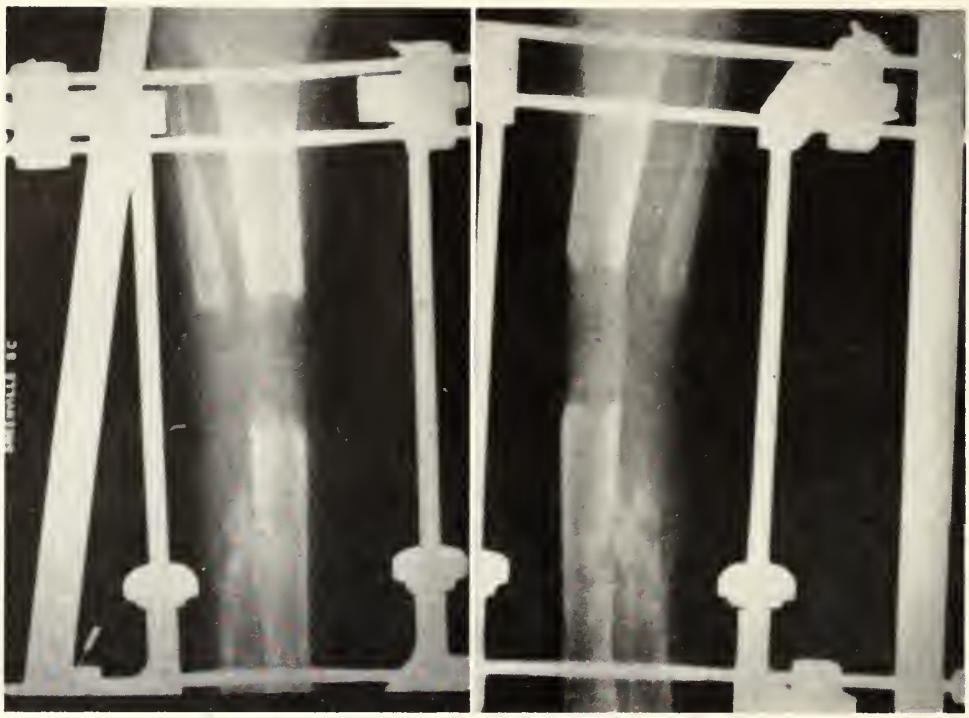


long leg walking brace with molded leather cuff. This is used for some 6 months or so, until the medullary canal has completely remodeled itself and looks like normal bone.

Dr. Stephens will show you the x-ray films on a case of a young boy that we did in 1964. This boy gained 2 inches in length on this tibia and we had previously arrested the opposite distal femoral epiphysis so that we gained 4 inches in length, as far as discrepancy is concerned. By losing 2 inches on one side, and gaining 2 inches on the opposite side we made up for a 4 inch discrepancy.

Many of the orthopedic surgeons in





childrens' centers are now using this method for serious discrepancies in length and in some instances femoral lengthenings are being used. It has already been indicated that the best alternative that we can give her at the present time would be to convert her into an above-knee amputee with a prosthesis. I would advocate that we go ahead with the tibial lengthening and try to gain 2 inches. If we are successful, we can go ahead with a femoral lengthening and try to gain another 2 inches. We, then, would have the alternative of going ahead with a growth arrest on the opposite side and in this way could gain the entire 6 inches by losing 2 inches on the normal side, gaining 4 inches on the short side, which would give her a total height of about 5 ft. 1 inch, which in my mind would be perfectly satisfactory. Or, if everything worked out beautifully and she still had some growth left, and we were still under age 12, and had not had any complications, we could even go for another inch in the tibia that had been previously lengthened. This has been done by Anderson and he



has gained as much as 4 inches at two different intervals on the same tibia. I think that this should be planned for this child and by the time she is mature she will have practically normal lengths and since she does have a good foot, hip, and normal sensation, she would have much better functional and cosmetic result than from any other method we could use, although this is quite a great deal to go through, but in the past, children with polio have certainly gone through as much, or more than this, in order to end up with good functional results.

Question—Dr. Riddle: Do you think that this method of lengthening of the short extremity will supplant shortening procedures of the long extremity that we have used through the years for leg length discrepancies—namely, growth arrest and femoral shortening?

Answer—Dr. Stelling: No, I do not. I think that with the probable risk, although it has been shown that this is not as great now as it used to be, that it is more formidable and entails much more risk than the epiphysiodesis. In the majority of cases that we see with discrepancies no more than an inch or two, we should still use the epiphysiodesis, or, if the patient is older, the leg shortening procedures over a rod, rather than go for lengthening. We should reserve the use of lengthening, or combination lengthening on one side and shortening of the other, for such unusual cases as the present one. The predicted discrepancy should be over 3 inches, or else a situation is presented where further shortening would result in difficult problems in itself, as it would in this case.

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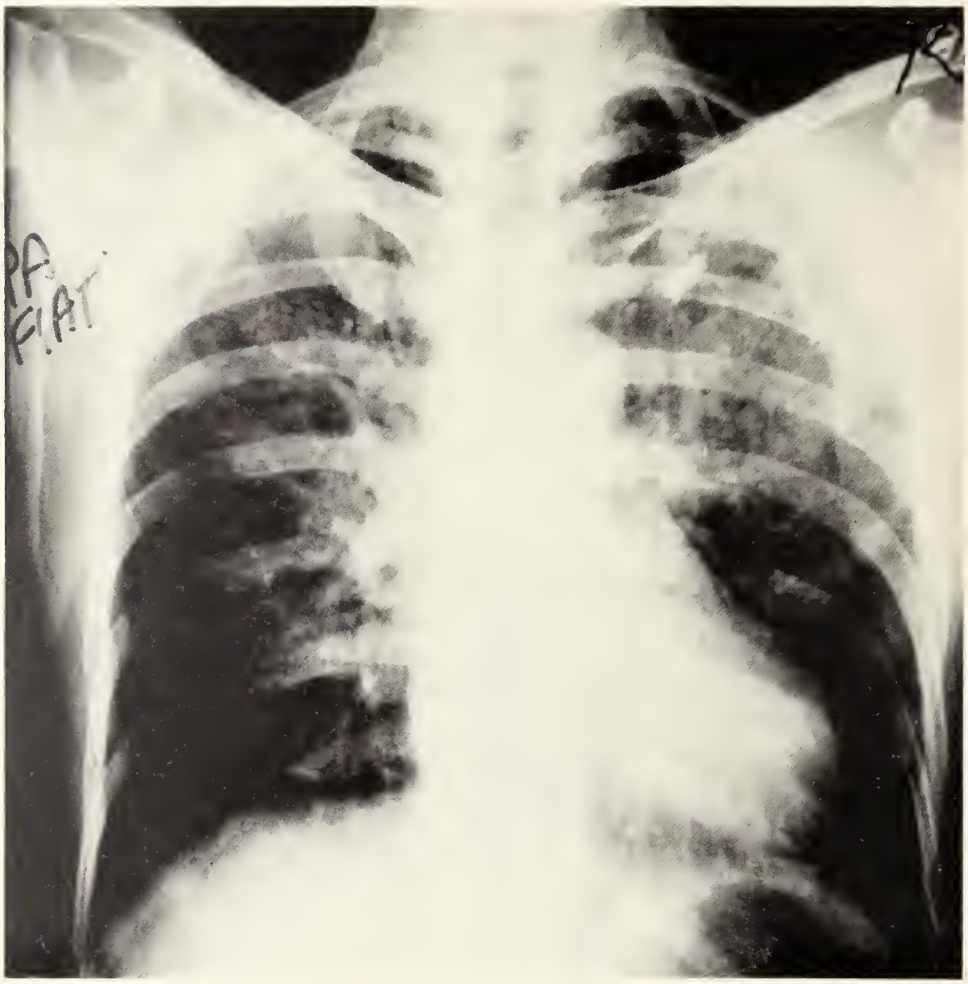
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X-RAY FILM OF THE MONTH

FRANK H. GRUBER, M.D.
Roper Hospital
Charleston, South Carolina



Hazy, soft shadows are present in both upper lung fields. The appearance is that of pulmonary edema but the patient is not a cardiac and does not have an acute infarction. The pertinent history is that the patient was found unconscious on the morning this film was made and, judging from his physical appearance, it is assumed that he had convulsed. The densities cleared the next day, ruling out aspiration pneumonia.

For discussion see page 148.



President's Pages

This is the last of my President's Pages. Thank you for giving me the honor of serving as president of our association, representing The Most Magnificent Profession the World Has Ever Known. It has been trying but pleasant—a Labor of Love. On my first Page I expressed the hope we could have a quiet and pleasant year. We have had and I am thankful.

It might be well to consider in summary the things with which we have been mostly concerned during the year. More detailed discussion has been presented in other communications.

The Osteopathic Committee is recommending that no changes be made in the osteopathic laws at this time. My personal hope is that eventually all pretenders to membership in any branch of the healing art will have to graduate from schools *accredited by the same committee* that judges regular medical colleges and take the same examination by the State Board of Medical Examiners .That means they would *all* be treated exactly like medical doctors.

There is a bill in the legislature to prevent advertising. I sincerely hope it passes.

Under Title XIX we have nailed down the promise that patients would have free choice of physician and that physicians would be paid their usual and customary fees. The program is to go into effect 'soon'. At first it will cover those already under Welfare. In spite of diligent efforts to the contrary it will be under the final authority of the DPW.

There is a bill in the legislature to allow chiropodists more leeway in practicing. I hope it fails.

Many physicians still serve the country in the armed forces. None has been drafted —newspaper headlines to the contrary notwithstanding. When a physician's name came up and he was not deferred he has volunteered. We should remember that if one is deferred another must go in his stead. If the state's fair share is twenty physicians at a given time twenty physicians go. Deferring one or more does not lessen our quota. It simply means that someone else must go in the place of the one who was supposed to go but did not.

Allowing one's name to be listed in the Yellow Pages of the telephone directory is the source of some discussion, pro and con. The 'pros' are mostly advocated by the telephone companies—a public service by the physicians, etc. Those against point out the listing is of value chiefly to the telephone companies—or at least those publishing the directories. It is said that listing every physician in South Carolina in the yellow pages for ten years could reach the neighborhood of half a million dollars.

Then the qualifications listed by physicians after their names is subject to little control. A surgeon can list himself as a surgeon even if he is a surgeon in nobody's sight except his own. All he has to do is have a license to practice medicine and have registered it in the county court house. A stranger has little way of knowing the calibre of a physician he pick's at random from the pages.

Almost anywhere a stranger can call a local hospital and secure the names and telephone numbers of qualified physicians.

I have instructed our local company not to allow my name to appear in the yellow pages.

The Auxiliary has been most complimentary and complementary and it has been a pleasure working with their illustrious members.

Meetings with the committee on Religion and Medicine have convinced me our profession is returning to its appreciation of the Almighty as the ultimate source of all wisdom and power.

The Association's committees, its officers, council, our priceless executive secretary, and members at large have been reassuringly responsive when help was needed and I thank every one.

Herewith I surrender, with much appreciation to all those who have helped me, and with a touch of nostalgia, to the affable, congenial, able Joel Wyman, the new president, The President's Page.

Norman O. Eaddy

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50 YEARS AGO

The Journal of the South Carolina Medical Association

April 1918

This issue was taken up largely with the official program of the 70th Annual Meeting to be held in Aiken, and an exposition of the attractions and offerings of Aiken itself.

It noted that the Aiken Hospital had opened in the spring of 1917 and that the Aiken Cottage Sanitorium was in active use.

QUIDNUNC

"An outward indication of an abnormal, unhealthy and unphysiological life is a small waist, whether abnormally natural, or caused by the wearing of corsets; avoid them as you would the plagues of Egypt, for they encompass sickness, premature decay and death. Such women are not capable of pure love, or right judgment, or, what is so essentially important, giving birth to healthy, vigorous offspring. Their very souls are malformed in harmony with their bodies. Some men admire small waists, but they are men who possess but a modicum of brains—or, if otherwise, they may admire, but they carefully guard against ever marrying them."

from **The Science of a New Life**
by John Cowan, M.D. 1873

Editorials

The County Officers Conference

The annual conference of county medical society officers and other interested members was held in Columbia at the Hotel Wade Hampton February 18, 1968. Some 50 people were present. Subjects of general interest to the profession were discussed at some length and a very successful program was presented.

Dr. Norman Eaddy, president of the Association, made a report on his recent visit of inspection to an osteopathic school in Philadelphia and described the situation educationally there as being 40 years behind the times in comparison with medical schools. He noted that other members of the committee appointed by the state legislature were of the same opinion and that the committee recommended that no change be made in state law concerning practice. He praised Dr. William McCord, president of the Medical College of South Carolina, highly for his forthright stand and his great assistance in the work of the committee.

As Dr. Arthur Rivers was unable to attend the meeting, Dr. Frank Owens took over his part of the program and discussed Title XIX, saying that the Association had wanted to have Title XIX in effect and that the South Carolina plan as it is proposed by the Dept. of Public Welfare had received verbal approval in Washington and presumably would go into effect on March 4. This meant that other programs such as OAA and MAA would go out of existence and that Title XIX would cover all people now on welfare rolls and new approved applicants. He outlined the services included and mentioned also that a drug list would probably be in effect. Charges would be "usual and customary". There would be free choice of physician. No limitation of the time spent in a nursing home was set.

Dr. Kenneth Aycock, State Health Officer, outlined the function of the State Board of Health under the present designation, saying that it had a contract with the Department of Public Welfare and acted in an advisory capacity. He noted that referral would be only by physicians to the State Board of Health Clinics and dwelt at some length on Home Health Services though County Health Departments. This service should be expanded and referrals from physicians are needed. He emphasized that all the procedures would be under the direction of the private physician.

Among the questions asked was whether under Title XIX a patient could go directly into a nursing home. This was answered in the affirmative and the distinction betwen a nursing home and an extended care facility was emphasized, Admission to the latter type of institution would depend on previous hospital stay under the regulations of Title XVIII. It was also brought out that hospitals must comply with Title VI (concerning non-segregation) to be eligible for patients under the new arrangements.

Current activities in Blue Cross-Blue Shield were outlined by Mr. Roy Grady and Mr. Gene English who spoke of the recent legislative trials and the many distorted reports that had been current. They expected to have increased sale of policies carrying higher benefits. Mr. English gave a summary of the volume of business of Medicare handled by Blue Cross-Blue Shield. He noticed that the rate of claim made by assignment was the highest in the country, amounting to 57 per cent. (This does not sound much like direct billing has been successful. Ed.) He stated that a new manual would be available very soon.

Dr. Willard Mills spoke of commercial

insurance and of the activities of the Health Insurance Council. He noted that coverage in this state was quite extensive and that commercial insurance covered 80 per cent of hospital costs. He also announced that uniform claim forms were in the process of development. He foresaw that in the future there would be a growth of multiphasic examinations and examination centers. Research by the insurance industry would continue and it was not unlikely that the industry would undertake financing of some hospitals. He felt sure that private health insurance would be very much needed in spite of the expansion of federal programs.

In answer to an inquiry about identification cards for insurance patients Dr. Mills explained that the companies could not guarantee the validity of coverage at any one time. He also emphasized the need for publicising the standardized form.

Mr. Robert M. Mayne, assistant to the director, Bureau of Health Insurance, Social Security Administration, gave an extended review of new legislation bearing on the federal programs and of recent amendments. He discussed the expansion of the original provisions and the rearrangement of confusing regulations.

Dr. Charles Summerall outlined the aims of the program for heart disease, cancer and stroke and emphasized that it was a cooperative project for which the help of the practitioner was essential. Its objective he said was to develop projects for which grants for specific purposes might be obtained. He noted that the program did not provide for federal treatment of patients nor for the construction of buildings, but was simply to promote widespread effective endeavors.

Mr. G. W. Blanchard, field representative of AMA, gave us an outline of the newest activities of the Association.

Mr. Meadors gave a summary of current legislative concerns. He expressed the belief that the osteopathic efforts would be ineffectual this year and that the legislature would adopt the report of the investigative committee. A bill to allow certain privilege to optometrists was not opposed by the S. C. Medical Association nor was the bill to direct licensing of nurses.

He noted that the podiatrists are seeking new privileges and want to be allowed to use any therapeutic agent and to extend the scope of their surgical treatment of the foot.

He spoke of two measures which had been inaugurated by the association, one of which was a bill to prohibit advertising by any member of the healing arts. This was obviously directed at the chiropractor. The other was to establish a definition of transfusions and transplants as services rather than commodities so that the usual warranty provision would not apply to them.

Those present enjoyed the pleasant luncheon that was given by the Association.

Letter to the Editor

Dear Dr. Waring,

The February 1968 issue of your Jour nal carried an editorial raising some questions about the efficacy of current psychiatric practice. The editorial offers two areas of doubt—one by the President of the American Schizophrenia Foundation and the other by the editorial writer. As to the remarks by the President of the Schizophrenia Foundation, one must recognize the basic philosophy of this group, which has included general criticisms of almost every current endeavor in the treatment of schizophrenia. The editorial comments, however, seem to me a more serious indictment of current psychiatric practice.

Most of us are dissatisfied with the

current state of knowledge about the etiology and treatment of mental disorders. This year, the U. S. Public Health Service will fund approximately $70 millions in mental health research in quest of more information about cause and treatment. In spite of our present state of knowledge, it should be pointed out that tremendous advances have occured in the past few years as a result of *psychiatrists'* efforts—for example, the clinical use of phenothiazines and the community mental health movement. These are only two examples of psychiatric advances which have greatly improved the treatment of mental disorders. It is illogical to imply that the state of knowledge of a science is only a result of a lack of industriousness and an isolation by the practitioners of that science.

A few words about the activities of psychiatrists in South Carolina—there are approximately 15,000 hospital beds in our State, of which more than 40% (6,400) are filled with psychiatric patients. In South Carolina, there are 65 members of the American Psychiatric Association out of approximately 2,000 physicians. So we quickly see that 3% of the State's physicians have responsibility for 40% of the hospitalized patients. That is where we are, Mr. Editor, not hiding behind our couches but taking care of patients.

It should also be pointed out that psychiatrists participate in our State's medical endeavors more than the editorial would imply. The same issue of the Journal contained four advertisements from psychiatric hospitals—I could not find one from other hospitals. Moreover, there were 10 pages of advertisements on psychiatric drugs, all of which had been processed through clinical trials by *psychiatrists.*

As the State's newest psychiatrist, I would like to congratulate our editor on the many opportunities he has to become better informed about psychiatric practice in South Carolina.

Sincerely yours,
R. Layton McCurdy, M.D.,
Professor and Chairman
Department of Psychiatry
Medical College of South Carolina

MINUTES OF COUNCIL SOUTH CAROLINA MEDICAL ASSOCIATION

Wade Hampton Hotel
Columbia, South Carolina

Sunday, Feb. 18, 1968
3:30 p.m.

Dr. Perry convened a called meeting of the South Carolina Medical Association Council immediately following the Annual Conference of County and State Medical Society Officers, sponsored by the Committee of SCMA on Public Relations, Dr. J. I. Waring, Chairman.

The following members were present: Dr. Norman Eaddy, President; Dr. Joel Wyman, President-Elect; Dr. Harrison Peeples, Vice President; Mr. M. L. Meadors, Executive Secretary; Dr. Joe Waring, Editor of The Journal; Councilors Dr. Clay Evatt; Dr. Harold Hope; Dr. William L. Perry (Chairman of Council); Dr. Hal Jameson, President, S. C. Medical Care Plan; and, Dr. Ben Miller, Secretary, SCMA. Mr. G.W. Blanchard, Field Representative, A.M.A., Chicago, Illinois, was also present.

The purpose of the meeting was declared to consider recommendations by the Insurance Committee of SCMA, Chairman, Dr. Joe Cain. Dr. Joe Cain was not present. A Membership Retirement Plan under Law HR-10 had been presented to the Insurance Committee and had the approval of that committee. Mr. John D. Cappelmann, Jr. presented this proposal from The General Agency, 12 Exchange Street, Charleston, South Carolina, to Council. The proposal is a very flexible

plan under the provisions of HR-10, which allows for a combination investment and insurance investment. Proposal follows.

After due discussion by Council, Dr. Eaddy moved, seconded by Dr. Jameson, that Council regard the proposal favorably. The motion was put and carried.

Dr. Eaddy, earlier in the day, had reported to the members attending the Annual Conference of County and State Medical Officers the outcome of the Legislative Committee report on osteopaths. The South Carolina State Legislature had appointed a committee to investigate the educational qualifications of osteopaths. This committee was composed of members of the House and Senate, Dr. McCord of the Medical College, Dr. Johnson to represent the osteopaths. Dr. Eaddy was the representative of the South Carolina Medical Association.

Dr. Eaddy had reported a favorable recommendation coming out of the Legislative Committee of the South Carolina Legislature as a result of the recommendations and work of the investigating committee. It was Dr. Eaddy's feeling that Dr. McCord's stand in the matter was a determining factor in presenting a report unfavorable to the osteopaths.

Cognizance was taken of this report in the Council meeting, and Dr. Joel Wyman moved that Council recognize the good work done by Dr. McCord in the stand that he had taken before the Legislative Committee. There were favorable comments from the members of Council and the resolution proposed by Dr. Joel Wyman to commend Dr. McCord in his good work was put and carried.

This concluded the meeting of the special meeting of Council.

Ben N. Miller, M.D.

PROPOSED "KEOGH" SOUTH CAROLINA MEDICAL ASSOCIATION MEMBERS RETIREMENT PLAN

TRUSTEE: First National Bank of South Carolina

INVESTMENT ADVISOR: T. Rowe Price and Associates, Inc.

LIFE UNDERWRITER: Shenandoah Life Insurance Company

Plan Administrators: The General Agency, 12 Exchange Street, Charleston, South Carolina.

THE ADVANTAGES OF A "KEOGH" RETIREMENT PLAN

1. Each member may qualify for as much as a $2,500.00 **Tax deduction** for each year in the plan.
2. Enjoy earnings on these funds which will accumulate **tax-free** until you retire.
3. For members having eligible employees you may have the compounding **benefit of tax-shelter** on up to $5,000.00 per year.
4. A Systematic Program of savings and investment which will build into a substantial retirement fund.
5. Purchase Life Insurance (Containing guaranteed annuity provisions at today's lower cost) at a tax advantage.
6. Increase employee loyalty by building a bonus fund for their retirement. Also, this should help in hiring the better employee and keeping them after they are really an asset to you. It also eases a possible costly obligation when you or they finally retire.

For each member the order of relative importance of these advantages is different. Often No. 1 is the reason for starting, but after a few years, Nos., 2, 3, 4, 5, or 6 may prove more rewarding.

To gain these advantages (that corporation employees have had for years) your money must be set aside for retirement in a manner that qualifies with Internal Revenue Requirements. The methods accepted by the IRS are in most cases, the same as any prudent man would use to prepare for retirement. This plan follows those guidelines and will meet the IRS qualifications for tax relief.

KEY PROVISIONS OF THE LAW

WHO QUALIFIES

Any member who has some or all of his earnings as self-employed (ie: sole proprietor and/or partner).

All full time employees may be included; those who have worked for the member or partnership for more than three years must be included; employees who average less than 20 hours a week or 5 months per year are considered part-time and do not have to be included.

CONTRIBUTIONS (2 TYPES)

(1.) Regular

Regular contributions may be any percentage of net income up to a maximum of 10%. This percentage figure is set by the member and remains constant unless he amends the plan when conditions change. Regardless or percentage, regular contributions **may not exceed** $2,500.00 per year. Regular contributions are 100% TAX DEDUCTIBLE

and enjoy FULL TAX SHELTER until withdrawn.

(2.) Voluntary

If a member has at least one participating employee; either the member, the employee, or both may make a voluntary contribution of up to an additional 10% of income (Max. $2,500.) per year. These contributions are not deductible but compound tax free as a result of the tax shelter or dividends and capital gains. These contributions do not require a set percentage formula and they do not have to be comparable between member and employee.

INVESTMENTS

The "Keogh Act" specifies the type of investments the self-employed may make.

Among those permitted are: Stocks and Bonds, Life Insurance and Annuities.

The "Keogh Act" also specifies how the above mentioned investments may be acquired.

THROUGH THE CREATION OF A SPECIAL TRUST. YOUR ASSOCIATION PLAN OFFERS ALL OF THESE INVESTMENT VEHICLES.

HOW THE PLAN WILL WORK

Once you approve the plan's availability the following advantages will accrue to the member choosing to participate.

Only through a group approach could we create your own investment trust. The use of this trust enables your members to gain some important advantages that are not all available through individual plans. The specifics of the plan are as follows:

TRUSTEE

The First National Bank of S. C. will act as trustee of your plan, custodian of your securities, clearing house for your contributions and payouts and record keeper for each account. This institution will provide **local service** to the members through their 42 branches located throughout South Carolina with resources in excess of two hundred and ten million dollars to guarantee safety and continuity.

INVESTMENT ADVISOR

T. Rowe Price & Associates, Inc., of Baltimore and New York provides investment research and advice. This firm provides similar service to a broad list of clients throughout the U. S. and in foreign countries. They have become well known in pioneering "The Growth Stock Theory of Investing." The firm's overall investment philosphy stresses growth of principal and income. The entire efforts of T. Rowe Price & Associates, Inc., are devoted to investments research and counsel and the firm is in no way engaged in brokerage activities nor does it perform the duties of a trustee or custodian. Of additional interest is the fact that **unlike** most funds, your fund will **not be subject to taxation** and can be managed **without** tax consideration, a distinct advantage of such an arrangement over general funds.

LIFE UNDERWRITER

Shenandoah Life Insurance Company of Roanoke, Virginia, a mutual Company incorporated in 1914 with an excess of one billion of insurance in force. Their life insurance policies will contain an **annuity feature** at retirement whereby participants may have accumulated investment funds placed under the life insurance contract to be paid out at the guaranteed annuity rates of today. Also, members and their employees (who are under age 60 and working full-time) may purchase up to $25,000.00 of whole life insurance **without a medical examination or other evidence of health.** Participation in the plan means automatic acceptance.

LOW ADMINISTRATIVE COSTS

No Sales or "Load" commission charged to the participant on acquiring his share of the investment fund.

Investment advisory fees of only 1/4% (graded downward as fund grows) and bank trustee fees of only 1/5%.

No annual bank maintenance fee; only a **one time** start up bank charge of $8.00 and plan administration charge of $10.00 on each participant's account. Therefore, the maximum annual fee after the initial set up is less than one-half of one percent of the assets of the investment fund. Note, there are never any charges on the cash value of life insurance and/or annuity contracts).

There are no sales or promotion fees to the Plan Administrators as their compensation is derived from the normal brokerage commission on the purchase of securities and insurance.

Group size allows a preferred insurance underwriting approach not available on an individual basis.

FLEXIBILITY AND CONVENIENCE

With one check and one set of records each participant can have his contribution automatically pay for all facets of the plan.

Your member has the option of choosing his own balance between equity investment (which may be as much as 100%) and insurance (which cannot exceed 40%).

Your member may choose to build his nest egg primarily through investments and at retirement convert into guaranteed annuities (which he or he and his spouse cannot outlive) for his payout, all within the framework of the same plan with a continuity of service and records.

Your member may emphasize life insurance during early years of practice when protection is paramount and later shift the emphasis into investments.

Your member may have already established an individual "HR-10" Plan. If he has and wishes to transfer he may do so as our program will permit this.

HOW IS THE PROGRAM STARTED

By your Insurance Committee and subsequently Council recommending that this program be made available to the membership for their individual consideration and action.



Dr. Dale Groom of Charleston has been reappointed a member of the Council on Scientific Assembly of the AMA. **Dr. William S. Hall** of Columbia has been reappointed a member of the Committee on Nursing of the AMA. **Dr. J. P. Boatwright**, native of Darlington, has been appointed director of professionl services at Crafts-Farrow State Hospital. **Dr. John A. Aycock Jr.** has announced the opening of his office for general practice at 85 Vincent Drive, Mount Pleasent, S. C. Allendale, Hampton, Colleton, Jasper and Beaufort Counties will have improved health for their rural citizens following final arrangement of a Health Grant made at the State Board of Health. **Dr. H. Parker Jones**, Beaufort County Health Officer, will direct the program. A building on North Fant Street, Anderson will house the offices of **Dr. R. H. Hand** and **Dr. Tom Vestal.** It is expected to be ready for occupancy soon. **Drs. Hand** and **Vestal** will be joined by **Dr. Charles Bauknight** of Walhalla who is currently completing a two-year tour of military duty. **Dr. Samuel Dee Campbell**, Piedmont physician, was recently honored on his 87th birthday with a party given by employees of J. P. Stevens and Co., Estes Plant. **Dr. Kenneth Aycock**, State Health Officer, presented a talk on "Planning a Premature Care Program in S. C." to the first International Conference on Prematurity at Ft. Lauderdale, Fla. in January. **Dr. Susanne G. Black** of Dillon has been named health clinician in the Dillon County Health Department. About 135,000 measles shots were given in S. C. in 1967 in mass campaigns and county health department immunization clinics, according to Frank Lewis of the Immunization Activities office, State Board of Health. **Dr. William E. Fender Jr.** of Walterboro has been reelected to active membership in the American Academy of General Practice. **Dr. Benton Burns**, Sumter pediatrician, is participating in the Volunteer Physicians for Vietnam, sponsored by the AMA. Dr. Burns will return April 26. **Drs. James A. Harmon** and **Ezra Marshall** of Pelzer are abandoning their practice in Pelzer. The announcement came in a joint statement by the two who have maintained a partnership at the Pelzer Clinic since Jan., 1966. **Drs. Laurie L. Brown** and **John D. Thomas** of Charleston; **Donald E. Saunders Jr.** and **Bartlette M. Cheatham** of Columbia spoke at the annual meeting of the S. C. Association of Nurse Anesthetists in February. **Dr. Theron Otis Walker** of Greer, S. C., has been elected to active membership in the American Academy of General Practice. **Dr. Weston Cook**, Columbia orthopedic specialist, is at the base camp of the "Plaisted Polar Expedition 1968", located on the northernmost bit of land of the North American continent—a speck on the globe called Ward Hunt Island at the edge of the Arctic "icepack". A Pennsylvania native and Columbia physician since 1943, Dr. Cook heard about the polar exploration through a Medical Amateur Radio bulletin. The exploration is the second attempt at tracing Adm. Robert E. Peary's famous Arctic trek to the North Pole in 1909.

Dr. Robert E. Jackson has been discharged from the U. S. Air Force and has reopened his office in Manning, S. C. He was named Flight Surgeon of the Year for the Tactical Air Command in 1967.



Medical College of South Carolina

Bids for two new buildings at the Medical College of South Carolina were received by the Board of Trustees on February 15, and are now under consideration.

Low bids for general contractors were J. W. Bateson and Company, Inc., Dallas, Texas, with $11,279,000.00 and Consolidated Engineering Company of Baltimore with $11,542,000.00.

After consideration by the Board of Trustees, bids were submitted to the U. S. Public Health Service office in Atlanta for approval. Final awarding of the contract is expected sometime this month.

To be constructed are a Basic Sciences-Dental School Building and a Student Activities-Administration-Library Building with a total combined area of 390,000 square feet of floor space. The buildings will be located north of the Medical College Hospital and will be connected to the Hospital by paved walkways and elevated covered walks.

Construction was made possible by a $8.25 million grant from the Department of Health, Education, and Welfare and matching funds approved by the South Carolina Legislature.

Architects and Engineers for the project are Lyles, Bissett, Carlisle and Wolff of Columbia.

The South Carolina General Assembly on February 7, elected **Neill W. Macaulay** of Columbia to the Board of Trustees of the Medical College as a lay member.

He succeeds **Julian T. Buxton** of Sumter, whose county has been moved out of the second Congressional District into another. Macaulay will represent the second district.

Dr. Charles D. Graber was recently elected to Fellowship in the American Academy of Microbiology.

On Feb. 11-12, **Dr. Dale Groom** was guest speaker at the annual meeting of the Society of Air Force Physicians held at the Wilford Hall USAF Hospital, San Antonio, Tex. Dr. Groom, a Consultant to the Surgeon General, discussed "The Stress Electrocardiogram" and also conducted a workshop in Clinical Cardiology at this meeting, held as a regional meeting of the American College of Physicians.

He attended the American College of Cardiology 17th annual Scientific Session in San Francisco, Feb. 28-March 3. Dr. Groom served as chairman of a panel on "Congenital Heart Disease in the Adult" and also participated in a conference on the topic of "Risk Factors in Coronary Artery Disease."

Dr. R. Layton McCurdy has been named Professor and Chairman of the Dept. of Psychiatry at the Medical College, he was Asst. Prof. of Psychiatry and Director of the Psychiatry Residency Training Program at Emory Univ. School of Medicine in Atlanta.

He succeeds **Dr. J. J. Cleckley** as Chairman of the Department. Dr. Cleckley will remain a faculty member as Professor of Psychiatry.

A native of Florence, Dr. McCurdy received his M.D. from the Medical College of S. C. in 1960. After an internship at the MCH, he took residency training at the Univ. of N. C. He served on the staff of the National Institute of Mental Health in Bethesda before joining the Emory faculty in 1966.

Newly appointed Asst. Prof. of Microbiology is **Dr. Norman L. Goodman**, who received his M.S. and Ph.D. degrees from the Univ. of Oklahoma. He has served as microbiologist with the U. S. Public Health Service and will assume his duties at the Medical College on May 1. Listed in American Men of Science, Dr. Goodman has published many scientific articles. His major research interest is in epidemiology and environmental factors in chronic respiratory diseases.

Dr. James Isidor Bicher has been named Associate in Anatomy and **Dr. Lawrence D. Hanback, Jr.**, Associate in Surgery. Both appointments are effective Jan .1. Dr. Bicher, a native of Argentina, attended the Univ. Medical School, Jerusalem, Israel. He served as senior scientist at the Rogoff Medical Research Institute, Beilinson Hospital.

Dr. Hanback earned his B.S. and M.S. degrees at the Univ. of Richmond, Va., and his M.D. degree from the Medical College of Va. He received his surgical residency training at the Medical College of Va. Dr. Hanback's major research interests are in the areas of trauma, burns, liver disease, and pancreatitis. His primary duties will be at the VA Hospital here.

Dr. William Steve Lang, Jr., a Greenville physician, has been named Asst. Clinical Prof. of Otolaryngology. He attended Duke Univ. and received his M.D. degree from Duke's School of Medicine. He took his residency training at N. C. Baptist Hospital. Dr. Lang has previously served on the full-time faculty of the Medical College from 1962 to 1964.

Dr. C. Thomas Fitts, professor of surgery, delivered the third lecture in the bioengineering series at the University of South Carolina on "Lymph Dialysis."



Apply internally.

Take a relaxing break for Coca-Cola. Couple of times a day. Because Coke has the taste you never get tired of. It's always refreshing.

SPECIALTY SOCIETIES IN SOUTH CAROLINA

For some reason rather obscure the specialty societies of the state get very little notice in our *Journal.* Indeed there is a rather general vagueness even among the members of the societies as to the official names of the societies and the current officers.

In an effort to remedy this situation, we have attempted to secure information from their secretaries and will attempt to keep this current.

So far information has been obtained from the following societies.

THE SOUTH CAROLINA SURGICAL SOCIETY will hold its annual meeting at the High Hampton Inn and Country Club, Cashiers, N. C. from June 13-June 16. Guest speaker will be Dr. Guy Odom, professor of Neurosurgery at Duke University.

Officers include: Dr. John K. Webb of Greenville, president; Dr. G. B. Hodge of Spartansburg, vice president and Dr. N. D. Ellis of Florence, secretary-treasurer.

AMERICAN COLLEGE OF SURGEONS, SOUTH CAROLINA CHAPTER will hold its annual meeting in conjunction with the annual meeting of SCMA in May.

Officers include: Dr. Louie B. Jenkins, president; Dr. J. K. Owens, vice president and Dr. Richard S. Wilson, secretary-treasurer.

SOUTH CAROLINA SOCIETY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY will meet jointly with the the North Carolina Society in September, 1968 in Wilmington, N. C.

Officers include: Dr. Frank W. Nicholson of Spartanburg, president; Dr. Frank Stanfield of Anderson, president-elect; Dr. Earl Jones of Florence, vice president and Dr. Roderick Macdonald of Rock Hill, secretary-treasurer.

SOUTH CAROLINA CHAPTER, AMERICAN ACADEMY OF GENERAL PRACTICE will hold its annual meeting Nov. 13-15, 1968 in Charleston, S. C. at the Francis Marion Hotel.

Officers include: Dr. Asbury Bozard, president; Dr. H. M. Stone, president-elect; Dr. William J. Bannen Jr., vice president; Dr. I. B. Horton, secretary; Dr. Rufus H. Cain, treasurer.

DISTRICT BRANCH OF THE AMERICAN PYSCHIATRIC ASSOCIATION met March 20 at the U. S. Naval Base Officer's Club. Guest speaker was Dr. Henry Brosin.

Officers include: Dr. Ramsey R. Mellette Jr., president and Dr. M. E. Borgstedt, secretary-treasurer.

SOUTH CAROLINA CHAPTER, OBSTETRICAL AND GYNECOLOGICAL SOCIETY will hold its annual meeting September 27, 1968 at Mount Vernon Motel in Sumter, S. C. A joint meeting with the North Carolina Obstetrical and Gynecological Society will be held at Midpines, N. C. in May, 1968.

Officers include: Dr. James E. Bell, president, Dr. Richard Sosnowski, president-elect; Dr. Harwood Beebe Jr., secretary-treasurer.

SOUTH CAROLINA SOCIETY OF ANESTHESIOLOGISTS will meet May 14, 1968 at Myrtle Beach.

Officers include: Dr. John Thomas, president; Dr. Roy E. Hudgens, Jr., vice president; Dr. Thomas T. Galt, president-elect and Dr. John M. Shingler, Jr., secretary-treasurer.

SOUTH CAROLINA CHAPTER, AMERICAN ACADEMY OF PEDIATRICS officers include: Dr. Henry W. Moore, chairman; Dr. John W. Rheney Jr., vice chairman; Dr. Casper E. Wiggins, secretary-treasurer and Dr. W. R. deLoache, chairman of Committee on Pediatric Practice.

SOUTH CAROLINA RADIOLOGICAL SOCIETY will hold its annual business meeting May 14 at Myrtle Beach at noon. Mr. George Hipp of Greenville, South Carolina representative of the National

Health Insurance Council, will be luncheon speaker.

Officers include: Dr. U. Hoyt Bodie, president; Dr. George Irwin, vice president; Dr. George W. Smith, Councilor to the American College of Radiology; and Dr. George W. Brunson, secretary-treasurer.

SOUTH CAROLINA PEDIATRIC SOCIETY will hold a business meeting at the time of the SCMA Annual Meeting. The members will meet again in the fall.

Officers incude: Dr. Charles W. Propst, president; Dr. Colquitt Sims Jr., vice president; Dr. Robert Gibbes, secretary-treasurer.

DIAPULSE—A CORRECTION

In the editorial on "Medical Quackery Still a Problem' in the March Journal, the statement was made that the Diapulse machine had been forbidden by law. The Diapulse equipment was *not* forbidden by law, and the statement was incorrect.

The government brought suit alleging that the machine was misbranded in 121 particulars. The jury did not find in favor of the government with respect to 72 of the government's claims, but rendered a verdict for the government on the remaining claims. However, as to these claims, the decision rendered did not order destruction of the device, nor that its sale in any way be forbidden by law. Rather, the manufacturer was given an opportunity to relabel the Diapulse unit.

The case on the other claims is in the process of being appealed in the United States Supreme Court.

MEETINGS

The American College of Physicians will present Frontiers in Gastroenterology May 12-15 at the Bellevue-Stratford Hotel, Philadelphia. For more information write Dr. Edward C. Rosenow, Jr., American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

South Carolina Pediatric Society will hold a business meeting at the time of the SCMA Annual Meeting. The members will meet again in the fall.

South Carolina Society of Anesthesiologists will meet May 14, 1968 at Myrtle Beach.

South Carolina Radiological Society will hold its annual business meeting May 14 at Myrtle Beach at noon. Mr. George Hipp of Greenville, South Carolina representative of the National Health Insurance Council, will be luncheon speaker.

The South Carolina Surgical Society will hold its annual meeting at the High Hampton Inn and Country Club, Cashiers, N. C. from June 13-June 16. Guest speaker will be Dr. Guy Odom, professor of Neurosurgery at Duke University.

South Carolina Society of Ophthalmology and Otolaryngology will meet jointly with the North Carolina Society in September, 1968 in Wilmington, N. C.

American College of Surgeons, South Carolina Chapter will hold its annual meeting in conjunction with the annual meeting of SCMA in May.

The 18th Annual Postgraduate Obstetric-Pediatric Seminar which is sponsored by the Maternal and Child Health Divisions of the State Health Departments and the Maternal Health Committees of the state medical associations of Georgia, Florida, Alabama, Mississippi, Tennessee, and South Carolina is scheduled to be held August 15-17, 1968 at the Desert Inn, Daytona Beach, Florida.

South Carolina Chapter, American Academy of General Practice will hold its annual meeting Nov. 13-15, 1968 in Charleston, S. C. at the Francis Marion Hotel.

South Carolina Chapter, Obstetrical and Gynecological Society will hold its annual meeting September 27, 1968 at Mount Vernon Motel in Sumter, S. C. A joint meeting with the North Carolina Obstetrical and Gynecological Society will be held at Midpines, N. C. in May, 1968.

DEATH

Dr. Warren Edward Fulmer

Dr. Warren Edward Fulmer, 72, retired physician of Columbia, died February 11 at his residence after a long illness.

Dr. Fulmer was born in Prosperity. He was graduated from Atlanta College of Physicians and Surgeons, now Emory University and had practiced medicine in Columbia more than 50 years, having begun in 1908.

Dr. Fulmer was a member of the Columbia Medical Society, the S. C. Medical Association and the American Medical Association.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

ALCOPARA

Anthelmintic Rx

Manufacturer: Burroughs Wellcome & Co.

Nonproprietary Name: Bephenium hydroxynaphthoate

Indications: Hookworm infections, and roundworm infections when they occur concomitantly with hookworm infestations.

Contraindications: None mentioned

Dosage: 5 Gm. twice daily for 1-3 days. Children under 50 lbs.—one-half above dose.

Supplied: Foil packets—5 Gm; envelopes of two.

DUPLICATE SINGLE PRODUCTS

LMD 10%

Hospital Solution Rx

Manufacturer: Abbott Laboratories

Nonproprietary Name: Dextran 40

Indications: Priming fluid in pump-oxygenators for perfusion during extra-corporeal circulation.

Contraindications: Thrombocytopenia, hypofibrinogenemia, and renal disease with severe oliguria or anuria.

Dosage: 1 to 2 Gm./k. body weight added to perfusion circuit.

Supplied: Sterile containers—500 ml. with 4.5 Gm sodium chloride or 25 Gm dextrose.

COMBINATION PRODUCTS

ARALEN w/PRIMAQUINE

Antimalarial Rx

Manufacturer: Winthrop Laboratories

Composition:		
	Chloroquine phosphate	500 mg
	Primaquine phosphate	79 mg

Indications: Malaria prophylaxis only

Contraindications: Acutely ill patients suffering from systemic disease mainfested by tendency to granulocytopenia (e.g. rheumatoid arthritis, lupus erythematosus). Patients receiving concurrently other potentially hemolytic drugs or depressants of myeloid elements of the bone marrow. Patients who have received quinacrine recently.

Dosage: Adults—one tablet weekly, starting the day before entering malarious area and continuing for six weeks after leaving it. Children—dose schedule formulated on basis of weight.

Supplied: Tablets—bottles of 100.

CORICIDIN DEMILETS

Cold Preparation—General o-t-c

Manufacturer: Schering Corporation

Composition:		
	Chlorpheniramine maleate	0.5 mg
	Phenylephrine HCl	2.5 mg
	Aspirin	80.0 mg

Indications: Symptomatic relief of the common cold in children.

Contraindications: None mentioned

Dosage: As indicated

Flavored; packages of 24.

CHERACOL CAPSULES

Cold Preparation—General o-t-c

Manufacturer: The Upjohn Co.

Composition:

Chlorpheniramine maleate	2.0 mg
Methoxyphenamine HCl	25.0 mg
Aspirin	324.0 mg
Caffeine	32.4 mg

Indications: Temporary relief of symptoms due to the common cold.

Contraindications: None mentioned

Dosage: One capsule q.4h. Not more than 4 capsules/24 hours.

Supplied: Capsules—packages of 24.

NEW DOSAGE FORMS

DECLOSTATIN

Antibiotic—B & M Spectrum Rx

Manufacturer: Lederle Laboratories

Composition:

Demethylchlortetracycline HCl	300 mg
Nystatin	500,000 U.

Indications: Intestinal moniliasis, infections caused by organisms sensitive to tetracyclines.

Coantraindications: History of hypersensitivity to either of its ingredients.

Dosage: 1 tablet twice daily for up to 15 days.

Supplied: Tablets—bottles of 12 and 48.

HEXADROL CREAM

Corticoid—Local Rx

Manufacturer: Organon Inc.

Nonproprietary Name: Dexamethasone

Indications: Contact dermatitis, seborrheic dermatitis, atopic dermatitis, and neurodermatitis.

Contraindications: Tuberculosis of the skin, and most viral skin infections.

Dosage: Apply lightly to affected area three or four times daily.

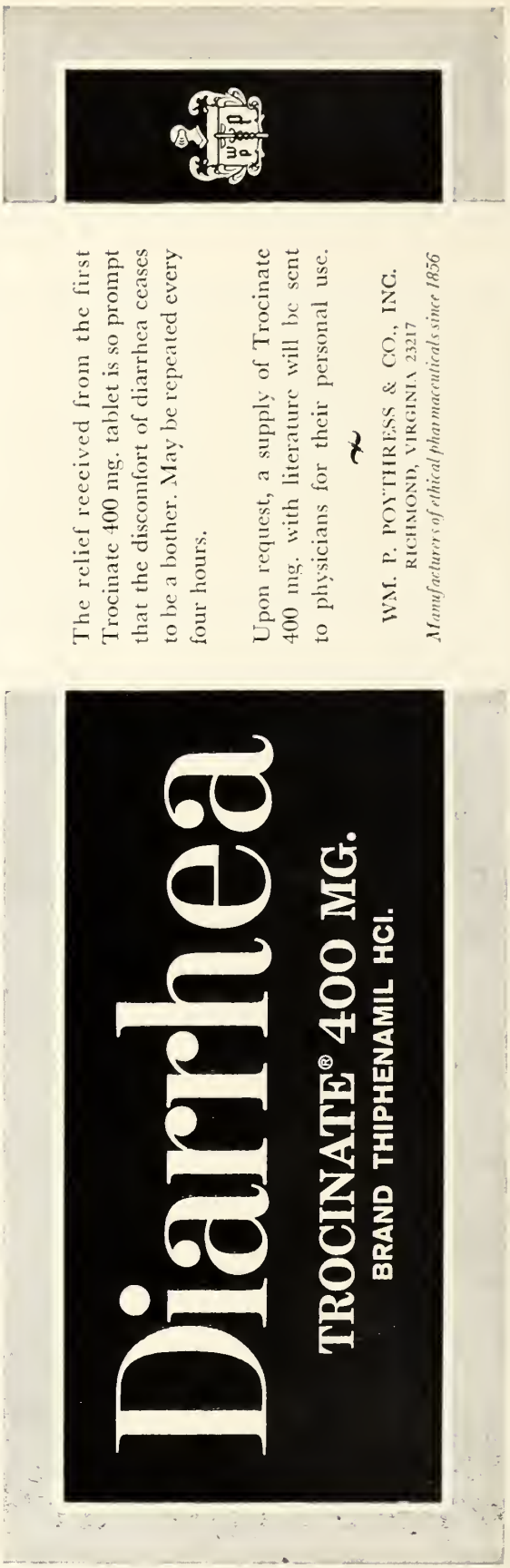
Supplied: Tubes—0.04%; 10 or 30 Gm

X-RAY FILM OF THE MONTH (Cont.)

This is a case of post convulsive pulmonary edema. The convulsions were caused by a subarachnoid hemorrhage. Current theory holds that the increased intracranial pressure brings about a lowered cardiac output and increased pulmonary venous and atrial pressure. The edema resolves quickly and disappears with in four to five days. It has been mentioned that the upper lung fields are often the primary site of involvement, which holds true in this case.

Ref: Chang, C. H. and Smith, C. A., Postictal pulmonary edema, Radiology, 89:1087-1089, (1967).

(More)





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ONE HUNDRED AND TWENTIETH ANNUAL MEETING OF THE

SOUTH CAROLINA MEDICAL ASSOCIATION

MYRTLE BEACH, MAY 13, 14 AND 15, 1968

GENERAL PROGRAM

HOUSE OF DELEGATES

NORMAN O. EADDY, M.D., PRESIDING

ORDER OF BUSINESS

MONDAY, MAY 13

9:30 A.M. Call to Order
Invocation
Report of Credentials Committee
Opening Remarks by the President
Introduction of President-elect
Announcement of Reference Committee
Presentation of Resolutions and Recommendations

10:30 A.M. Introduction of Officers and Guests of Woman's Auxiliary

Reports of Officers:

The President
The President-elect
The Executive Secretary
The Secretary
The Treasurer
The Editor of the Journal
The Chairman of Council
The Delegates to the A.M.A.

Reports of Committees:

(The reports of the Committees will have been published in the Journal and will not be read before the House. Any supplementary remarks by the Chairmen will be heard at this time.)

11:00 A.M. (SPECIAL ORDER) The Annual Meeting of the Corporation, The South Carolina Medical Care Plan

Election of Directors:

The terms of the following expire this year:

Mr. Frank S. Adams
Dr. Joseph P. Cain, Jr.
Mr. Wilton F. May
Mr. M. L. Meadors
Dr. W. West Simmons
Dr. Wendall H. Tiller

Report of State Board of Medical Examiners
Report of Executive Committee of State Board of Health
New Business

3:00 P.M. **Meeting of Reference Committees**

(All members of the Association are invited to appear before the Committees considering matters in which they are interested. Meeting places will be posted and announced.)

TUESDAY, MAY 14

9:30 A.M. Call to Order
Reports of Reference Committees

11:30 A.M. Annual Elections

Officers:

President-elect
Vice President
Secretary
Treasurer

Delegate to the A.M.A. (2-year term):

The term of Dr. George D. Johnson expires December 31, 1968.

Alternate Delegate to the A.M.A. (2-year term):

The term of Dr. Thomas Parker expires December 31, 1968.

Councilors (3-year terms):

Third District—The term of Dr. Martin M. Teague expires. (1965)
Sixth District—The term of Dr. W. L. Perry expires. (1959)
Ninth District—The term of Dr. Harold P. Hope expires. (1965)

Members of Mediation Committe (3-year terms):

Third District—The term of Dr. Robert S. Clarke, Jr., expires. (1962)
Sixth District—The term of Dr. Swift C. Black expires. (1965)
Ninth District—The term of Dr. Francis P. Owings expires. (1962)

Member of Benevolence Fund Committee (3-year term):

The term of Dr. Harold S. Pettit expires.

Members of State Board of Medical Examiners (4-year terms):

Sixth Congressional District—The term of Dr. Harold S. Gilmore expires.
Member-at-Large—The term of Dr. Harold E. Jervey, Jr., expires.

Member of State Board of Nursing Examiners (5-year terms):

The term of Dr. Lawrence V. Flowers expires.

Member of Hospital Advisory Council to the State Board of Health (4-year term):

The term of Dr. T. C. McFall expires

Selection of Place for 1969 Annual Meeting.
Sine Die Adjournment.

SOUTH CAROLINA MEDICAL ASSOCIATION MEETING
SCIENTIFIC PROGRAM

TUESDAY, MAY 14, 1968

Dr. Norman O. Eaddy, Presiding
2:00—Newer Concepts of Muscle Disease
Dr. Earl H. Godfrey, Charleston
2:20—Resuscitation and Definitive Treatment of the Drowning Victim
Dr. Joseph S. Redding, Chief of Anesthesiology, Baltimore City Hospitals, and Professor of Anesthesiology, U. of Md.
3:00—Discussion
3:10—Break to visit exhibits.
3:30—Immuno-Globulins in Health and Disease
Dr. W. M. Davis, Charleston
3:50—Computer Science as Applied to Modern Radiation Therapy
Dr. Keene M. Wallace and James O. Fenn, M.S., Charleston
4:15—Current Problems in Cancer Chemotherapy
Dr. John Laszlo, Associate Professor of Medicine, Duke University
4:50—Discussion
5:00—Adjournment

WEDNESDAY MORNING, MAY 15, 1968

Dr. Harrison Peeples Presiding
AMERICAN COLLEGE OF SURGEONS, S. C. CHAPTER
Dr. Louie B. Jenkins, President, Moderator
9:00—Modern Concepts of Cleft Lip and Cleft Palate Therapy
Dr. Robert F. Hagerty, Charleston
9:20—Discussion
9:25—Spontaneous Perforations of the Esophagus.
Dr. William S. Houck, Jr., Florence
9:45—Discussion
9:50—Newer Drugs in Gastroenterology
Dr. Clarence W. Legerton, Charleston
10:10—Discussion
10:15—Break to visit exhibits
10:35—New Antibiotics
Dr. Louis P. Jervey, Charleston
10:55—Discussion
11:00—The Fundamentals of Tissue Transplantation
Dr. H. Biemann Othersen, Jr., Charleston
11:20—Discussion
11:25—The Properitoneal Hernia Repair
Dr. Henry B. Gregorie, Jr., Charleston
11:45—11:40—Discussion
11:50—Newer Aspects of Local Treatment of Burns
Dr. C. Thomas Fitts, Charleston
12:10—Discussion
12:15—Luncheon Break

WEDNESDAY AFTERNOON, MAY 15, 1968

Dr. Joel W. Wyman, Presiding
2:15—Medical Ethics and Morals in a New Age
Dr. Paul S. Rhoads, Professor Emeritus of Medicine, Northwestern University
2:55—Heart Transplantation: Past, Present, and Future
Dr. Peter Hairston, Charleston.
3:15—Discussion of Dr. Hairston's paper to be opened by Dr. Rhoads.
3:25—Break to visit exhibits.
3:45—Panel Discussion on Sex Counselling.
Dr. J. R. Sosnowski, Charleston

Rev. Edwin C. Coleman, Charleston
Dr. David R. Mace, Professor of Family Sociology, Bowman-Gray School of Medicine, Winston-Salem, N. C.
5:00—Adjournment of Scientific Session

COMMITTEE ON SCIENTIFIC PROGRAM



John C. Hawk, Jr., Chairman
Charleston

James S. Garner, Jr.
Mullins
Dana C. Mitchell, Jr.
Columbia
Buford S. Chappell
Columbia
James G. Johnson
Orangeburg
B. Owen Ravenel
Charleston
Edwin R. Wallace III
Barnwell

SPEAKERS ON THE SCIENTIFIC PROGRAM

Dr. Peter Hairston

Peter Hairston, M.D. a native of North Carolina, graduated from Johns Hopkins Medical School in 1957, afterwards serving in the Johns Hopkins Hospital and at the University of Virginia Hospital where he was senior resident and also a resident in Cardiovascular and Thoracic Surgery. For two years he was Surgeon in Chief of Ramey AFB and is now Assistant Professor, Division of Thoracic Surgery, Medical College of South Carolina. Dr. Hairston is a diplomate of the American Board of Surgery and the American Board of Thoracic Surgery and holds membership in a number of medical organizations.

Dr. Robert F. Hagerty

Robert F. Hagerty, M.D. is a native of Boston and was educated at Harvard and Johns Hopkins School of Medicine. He is a diplomate of the American Board of Surgery and the American Board of Plastic Surgery, and a member of the American Association of Plastic Surgeons. His major interest is in cleft lip and cleft palate surgery, and he has contributed some 40 papers to medical literature. His hospital experience was obtained in Johns Hopkins, Duke, Memorial Hospital, and Roosevelt Hospital. He is Associate Professor of Surgery in the Medical College of South Carolina and is director of the Cleft Palate Center there.

Dr. Joseph S. Redding

Joseph S. Redding, M.D. of Baltimore, Maryland is a native of Macon, Georgia. His academic degrees were taken at the University of North Carolina and his M.D. degree at the University of Maryland. His residency in anesthesiology was served at the University of North Carolina. He is a diplomate of the American Board of Anesthesiology and a Fellow of the American College of Anesthesiology. He is currently president of both the Southern Society of Anesthesiologists and the Maryland—District of Columbia Anesthesiologists. He holds several academic positions in Baltimore. Dr. Redding practiced medicine in Chester, S. C. from 1951 until 1956.

Dr. William Stokes Houck Jr.

William S. Houck, M.D. is a native of Florence. He received his B.S. degree at Davidson College and his M.D. degree at the Medical College of South Carolina. He served his internship at St. Louis City Hospital and his residency at Duke Hospital. He is certified by the Boards of General Surgery and Thoracic Surgery. He served two years in the Army and was Chief of the Section of Surgery at Fort Leavenworth. He was on the staff of a number of Richmond hospitals and is now in the practice of general surgery in Florence, S. C.

Dr. Paul Spottswood Rhoads

Paul S. Rhoads, M.D., a native of Indiana, is a professor emeritus of medicine at Northwestern University Medical School in Chicago, where he has been associated with many major hospitals. He was associated at one time with Rush Medical College. He has been on the editorial board of the Archives of Internal Medicine, and chief editor from 1950 to 1961. He has been very active in the American Medical Association. He has numerous affiliations with medical organizations, and is a member of Sigma Xi. He is the author of about 100 papers dealing with infectious disease or Medicine and Religion.

Dr. Henry Biemann Othersen Jr.

Dr. Henry Biemann Othersen is a graduate of the College of Charleston and the Medical College of South Carolina. He has done internships and residencies at the Medical College Hospital, the Philadelphia General Hospital, the Children's Hospital of Columbus, Ohio, and the Massachusetts General Hospital. He is a diplomate of the American Board of Surgery and the American Board of Thoracic Surgery. He is currently Assistant Professor of Surgery at the Medical College of South Carolina.

Jimmy O'Niel Fenn

Jimmy O'Niel Fenn is a native of Brunswick, Georgia. He received his B.S. degree at Lincoln Memorial University in Harrogate, Tenn. and his M.S. from Emory University. From 1965 to 1967 Mr. Fenn was an assistant Radiation Physicist in the Mammography Section at Emory and later an instructor in the Department of Radiology there. At present he is a Radiation physicist in the Medical College of South Carolina.

Dr. Keene Manning Wallace

Keene M. Wallace, M.D. received his M.D. degree from George Washington University School of Medicine. He served his internship at the hospital there, and his surgical residency at Doctor's Hospital in Washington. Dr. Wallace received radiology training at Walter Reed General Hospital and became an associate in Radiology at George Washington University. He has held positions at District of Columbia General Hospital, Hurley Hospital and Harrisburg Polyclinic Hospital. At present Dr. Wallace is professor of Department of Radiology and head of Radiotherapy section at the Medical College of South Carolina.

Dr. Charles T. Fitts

Charles T. Fitts, M.D. is a native of Jackson, Tenn. He was graduated from Princeton University and received his M.D. degree at the University of Pennsylvania. He interned at the Hospital of the University of Pennsylvania and was surgical resident at the University of Mississippi Medical Center. Dr. Fitts served as captain in the Medical Corps of the U. S. Army. In 1961 he received a gold medal from the Southeastern Surgical Congress. He was chief, Trauma Study Branch, U. S. Army Surgical Research Unit, Brooke Army Medical Center, Ft. Sam Houston, Tex. Dr. Fitts is on the full time faculty of the Medical College of S. C. where he is Assistant Professor of Surgery. He is atending surgeon at the Medical College Hospital and the Veterans Administration Hospital and chief of surgery at Charleston County Hospital. He is also a surgery consultant at the U. S. Naval Hospital.

Dr. Clarence W. Legerton

Clarence W. Legerton, M.D. is a native of Charleston and was graduated from Davidson College and received his M.D. degree from the Medical College of South Carolina. He served his internship and residency at the University of Maryland Hospital. He served as captain in the U. S. Army Medical Corps. He held a fellowship in gastroenterology at Duke Hospital and was instructor in medicine in Duke University School of Medicine. He is a diplomate of the American Board of Internal Medicine and American Board of Gastroenterology. At present he is Associate Professor of internal medicine and Chief, Division of Gastroenterology at the Medical College of South Carolina. Dr. Legerton is active in city government in Charleston and in many local community organizations.

Dr. John Laszlo

John Laszlo M.D. is a native of Cologne, Germany. He was graduated from Columbia University and received his M.D. degree from Harvard University. He has held positions at the University of Chicago Clinics, the National Cancer Institute, and Duke Hospital, where he was assistant professor of Medicine. At present he is Chief, Hematology Section, Durham Veterans Administration Hospital and Associate Professor of Medicine at Duke University.

The Rev. Edwin C. Coleman

The Rev. Edwin C. Coleman, a native of Jackson, Miss., is rector of St. Michael's Episcopal Church, Charleston. He received his A.B. degree from Louisiana State Uni-

versity and a Bachelor of Divinity from the University of the South, Sawanee, Tenn. He was ordained Deacon in 1953. Mr. Coleman was curate in a Louisiana Mission Field; rector of Mt. Olivet Church in Pineville, La., Chaplain Central Louisiana State Mental Hospital; rector of St. John's Church, College Park, Ga.; served on the Board of Examining Chaplains, Dioceses of Atlanta and South Carolina and Provincial Chaplain of the Daughters of the King. Mr. Coleman is chairman of the Department of Christian Education of the Diocese of South Carolina and a member of the diocesan Executive Board.

Dr. J. Richard Sosnowski

J. Richard Sosnowski, M.D. is a native of Charleston. He was graduated from Clemson College and received his M.D. degree from the Medical College of South Carolina. He interned at Roper Hospital, Charleston, where he was also assistant resident OB-GYN and later resident and teaching fellow OB-GYN at Roper and the Medical College. He served as an obstetrician-gynecologist during the Korean Conflict. He is on the staff of St. Francis Hospital, Medical College Hospital, and Roper Hospital, he is also on the Board of Commissioners of Roper Hospital.

Dr. Louis Preston Jervey

Louis Preston Jervey, M.D. is a native Charlestonian. He was graduated from The Citadel and the Medical College of South Carolina. He served his internship and residency at Cincinnati General Hospital. Dr. Jervey served with the U. S. Navy from 1950-52. He has had academic appointments at the University of Cincinnati College of Medicine, the Medical College of South Carolina, where he was appointed Associate Dean in 1967. He is a member of many medical organizations. He is associate professor of Medicine at the Medical College of South Carolina.

Dr. David R. Mace

David R. Mace, M.D., is a native of Scotland, holds degrees from London, Cambridge, Bristol and Mancester Universities. He was Methodist minister in England from 1939 to 1944 and resigned to specialize in marriage counseling. He is one of the founders of the National Marriage Guidance Council of Great Britian. He has held positions at Drew University, New Jersey; University of Pennsylvania School of Medicine and staff consultant of Marriage Council of Philadelphia. He has been an executive director of the American Association of Marriage Counselors since 1960, was president of the National Council on Family Relations and president of Sex Information and Education Council of the U. S. He has also held positions with the International Union of Family Organizations. Dr. Mace has traveled and worked extensively abroad, and is author of many books and articles. He is at present professor of Family Sociology, Behavioral Sciences Center, Bowman Gray School of Medicine, Wake Forest University in Winston-Salem.

Dr. Henry B. Gregorie, Jr.

H. B. Gregorie Jr., M.D., A South Carolinian, was graduated from the Medical College of South Carolina. He served his internship at Roper Hospital and residencies at Roper Hospital and the Medical College. Dr. Gregorie served as captain in the U. S. Air

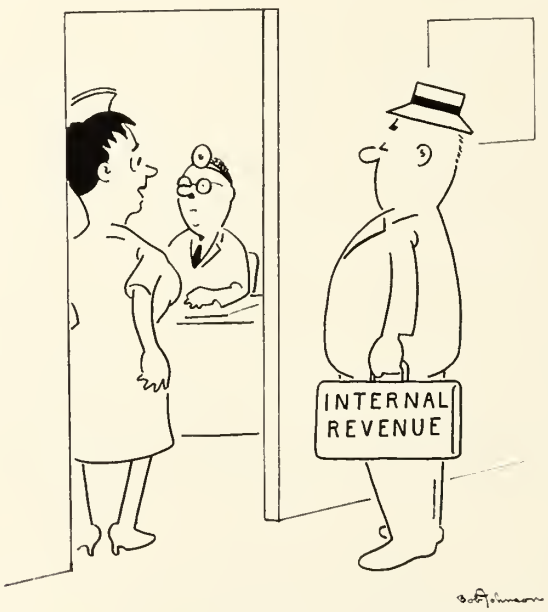
Force. He holds memberships in many societies including the American College of Surgeons and the Society for Surgery of the Alimentary Tract. He is on the staff of the Charleston hospitals and is visiting lecturer at the U. S. Naval Hospital. He is clinical assistant professor at the Medical College of South Carolina. He is in the private practice of surgery in Charleston. Dr. Gregorie is author of many papers.

Dr. Earl H. Godfrey

Earl H. Godfrey, M.D. is a native of Florence, S. C. He was graduated from the University of South Carolina and received his M.D. degree from the Medical College of South Carolina, where he also served his internship and residency. He has held a position at the University of Pennsylvania, department of Neurology. Dr. Godfrey served in the U. S. Navy. He is a consultant at the Veterans Administration Hospital, Roper Hospital and St. Francis Hospital. He is associate in Neurology at the Medical College of South Carolina and hold memberships in many medical organizations.

Dr. William McAlhany Davis

William McAlhany Davis, M.D. is a native of Columbia. He was graduated from the University of South Carolina and the Medical College of South Carolina, where he also served his internship. He served his residency at the University of Florida Medical School and the Medical College of South Carolina. At present he is an instructor in Pathology at the Medical College of South Carolina and is a member of the American Society of Clinical Pathology.



"He wants to ask about some sort of check up, Doctor."



GOV. ROBERT E. McNAIR

BANQUET SPEAKER

Gov. Robert E. McNair, a native of Cades, S. C., was graduated from the University of South Carolina, where he received A.B. and LL.B. degrees. In 1948 Gov. McNair moved to Allendale, where he engaged in the practice of law with the firm McNair & Lawton. He served in World War II in the U. S. Navy. He was a member of the S. C. House of Representatives from Allendale County from 1951 to 1960. He was chairman of the Judiciary Committee, a member of the Judicial Council of S. C., a member of the Legislative Council of S. C.; vice chairman of the Statutory Laws Committee, Development Board Study Committee and Insurance Laws Study Committee. He was elected lieutenant governor in 1962, later becoming governor.



DR. HOYT D. GARDNER

SCALPEL BANQUET SPEAKER

Dr. Hoyt D. Gardner was born in Paragould, Arkansas and served in the U. S. Navy in World War II and the U. S. Air Force during the Korean Conflict. He was graduated from the University of Louisville. Dr. Gardner served his internship at Receiving Hospital in Detroit and his surgical residency at Henry Ford Hospital. He has been in the private practice of general surgery since 1958 in Louisville, Kentucky.

Dr. Gardner is a diplomate of the American Board of Surgery and a fellow of the American College of Surgeons. He is a past chairman of Kentucky Educational Medical Political Action Committee and past president of the Jefferson County Medical Society. Dr. Gardner is a member of City-County Board of Health for Louisville and Jefferson County and secretary-treasurer of AMPAC.



Mrs. William Strohecker, President

WOMAN'S AUXILIARY

TO THE

SOUTH CAROLINA

MEDICAL ASSOCIATION

CONVENTION

The 45th annual convention of the Woman's Auxiliary to the South Carolina Medical Association will be held at Myrtle Beach, S. C. on May 13, 14, 15, 1968. A most cordial invitation is extended to all members and to each doctor's wife who is not a member to attend the general meeting and the social functions.

Registration will begin at 2:00 p.m. on Monday, May 13 and continue until 10:00 Wednesday May 15 in the lobby of the Ocean Forest Hotel for the convenience of members and guests. Tickets for the luncheons on Wednesday may be obtained at the Registration Desk.

MONDAY, MAY 13, 1968

10:30 A.M.—President and President-elect present report to the House of Delegates, South Carolina Medical Association.

12:30 P.M.—Finance Committee meeting—President's suite . . . Mrs. George Smith, presiding.

2:00 P.M.—Student Loan Fund Committee meeting—President's suite . . . Mrs. Walter Bonner, presiding.

2:15 P.M.—Health Careers Committee meeting—President's suite . . . Mrs. W. P. Turner, presiding.

P.M.—Scalpel Banquet, Ocean Forest Hotel

TUESDAY, MAY 14, 1968

10:30 A.M.—Executive Board meeting—Pine Lakes International Country Club . . . Mrs. William J. Strohecker, presiding.

12:30 P.M.—Executive Board Luncheon—Pine Lakes International Country Club.

2:00 P.M.—Round Table Conference of County President's and President-elects—President's suite . . . Mrs. Peter Gazes, President-elect, presiding.

3:00 P.M.—"Special Treat for the Ladies"

Annual Banquet, Ocean Forest Hotel, Dr. Norman Eaddy, presiding.

WEDNESDAY, MAY 15, 1968

10:00 A.M.—House of Delegates and General Meeting—Ocean Forest Hotel . . . Mrs. William J. Strohecker, presiding.

1:00 P.M.—Membership Luncheon—Pine Lakes International Country Club . . .

Guest Speaker—Mrs. Erle E. Wilkinson, Constitutional Secretary, Woman's Auxiliary to the American Medical Association.

2:30 P.M.—Post Convention Board Meeting—Mrs. Peter Gazes, President, presiding.

We do hope you will participate in and enjoy the activities that have been planned for you and that you will help make this convention an outstanding success. We are looking forward to seeting you in Myrtle Beach in May.

Mrs. William J. Strohecker, President



Norman Eaddy, M.D., President

REPORTS OF COMMITTEES

Report of the Executive Committee of the State Board of Health

With much regret the Executive Committee accepted the resignation of Dr. W. R. Wallace as its chairman, a post in which he had served with dedication since 1944. He is continuing to serve as a member of this Committee to which he was first elected in 1922.

The Committee elected me as its chairman, Dr. John B. Martin, Jr., as its vice-chairman, and Dr. O. B. Mayer to serve the unexpired term of Dr. Frank C. Owens who resigned upon his election as senator. Dr. E. Kenneth Aycock began serving as state health officer on January 1, 1967.

Increasing responsibilities have been placed upon the State Board of Health during the year. Among the chief of these is the designation of the State Board of Health by the Governor as the official state agency for comprehensive health planning (under P. L. 89-749 as amended by P. L. 90-174) with the purpose of promoting and assuring the highest level of health attainable for every person, in an environment which contributes positively to healthful individual and family living, and with the purpose of assuring comprehensive health services of high quality for every person, but without interference with existing patterns of private professional practice of medicine, dentistry, and related healing arts. The Governor has appointed a 25-member Advisory Council for Comprehensive Health Planning to assist the State Board of Health in this undertaking, and the State Board of Health has appointed a director and an assistant. It is anticipated that there will be comprehensive health planning on a local level, and local physicians are urged to become involved, along with all health and health-related professions, institutions, and agencies, in the planning for improved health services within their community.

A number of established programs are being expanded. Special emphasis is being given to family planning, and our program is recognized as one of the best in the nation. South Carolina is one of the few states to provide family planning clinics for the entire State, with a clinic in every county. Efforts are being made for closer cooperation with the State and local Departments of Public Welafre in this activity. The success of this program has been due largely to the pronounced assistance of practicing physicians over the entire State.

Since Title XIX is a health program, the State Board of Health has signed a contract with the Department of Public Welfare (which the Governor designated as the principal agency for its administration) to cooperate in carrying out the medical aspects of the program and to make its services available to the greatest extent possible.

The State Department of Public Welfare shall retain its requisite ultimate authority for exercising administrative judgment in the statewide administration of the Title XIX plan. The State Board of Health is not authorized to change, disapprove, or delay action on any administrative decision of the State Department of Public Welfare, or to otherwise substitute its judgment for that of the State Department of Public Welfare as to the application of policies, rules, and regulations promulgated by the State Department of Public Welfare. The responsibiilty of the State Board of Health is to assist with this program and to give assurance to the Department of Public Welfare as to the standards, quality, and continuity of health care rendered.

In carrying out this role, it is the intention of the State Board of Health to request the S. C. Medical Association to appoint a committee of practicing physicians, representatives of various areas of the State, to assist in programming and carrying out this responsibility.

The contract also states that the Board of Health shall provide, when needed by the Department of Public Welfare, consultation as to the development and implementation of standards for medical and remedial care, assistance in gathering data for planning and content of the State Plan for Title XIX, and assistance in broadening the scope of medical service offered under the plan.

South Carolina was one of three states selected for a rural health pilot project sponsored by nine federal agencies and designed "to identify and solve problems of comprehensive health care in rural areas." Governor McNair designated the area including the counties of Allendale, Hampton, Colleton, Jasper, and Beaufort and assigned to the State Board of Health the responsibility for developing and coordinating the program. A local health advisory planning council has been elected consisting of the following physicians, hospital administrators, and public health representatives: Doctors T. B. Warren, Jr., representing Allendale County, B. H. Keyserling representing Beaufort County, W. P. McDaniel representing Colleton County,J. A. Hayne representing Hampton County, and C. P. Ryan, Jr., representing Jasper County. Hospital Administrators: W. J. Wicker representing Allendale County Hospital, A. R. Nicholson, Jr., representing Beaufort County Hospital, R. A. Sineath representing Colleton County Hospital, J. A. McNab representing Hampton General Hospital, and J. W. Exley representing Ridgeland Hospital. Public health administrators: Dr. H. Parker Jones of Beaufort County Health Department, Mrs. Frankie Rainey of Colleton County Health Department, and Mr. Somers B. Pringle of Beaufort County Health Department. It is expected that the local practicing physicians will spear-head the leadership necessary for the success of this project.



Harrison Peeples, M.D., Vice-President

Since the Home Health Services Subdivision of the State Board of Health was certified as the home health agency for South Carolina on July 1, 1966, with plans for the services to be rendered by personnel of the local county health department, 35 county health departments have been certified to provide home health services under the health insurance progra. All of these 35 counties provide skilled nursing service and at least one additional service, with 12 counties having physical therapy, one having medical social service, and 24 having home health aide services available. It is anticipated that the remaining 11 counties will be certified to provide home health services during 1968.

Ten requests by the Department of Mental Health for sexual sterilization were approved by the Executive Committee. The present sterilization law in South Carolina is out-dated, and there is need for changes. The Executive Committee requested the Maternal Health Committee of the State Medical Association to recommend some legislation with regard to both sterilization and abortion. After a committee discussion of these subjects, the committee reported that there are too many ramifications for it to make proper recommendations for revision. It proposed that an advisory body be constituted to investigate these subjects with the idea of changing both laws. A committee has been appointed which includes Dr. O. B. Mayer, as member of this Executive Committee: Doctors Mar-

garet Q. Jenkins, E. J .Dennis, and Ramsey Mellette of the Medical College of South Carolina; Doctors Alexander Donald and Charles Still of the South Carolina State Hospital; Dr. Richard Sosnowski representing the South Carolina Obstetrics-Gynecology Society; Dr. Charles James representing the South Carolina Chapter American Academy of Pediatrics; Doctors Hilla Sheriff and Judith Hood of the South Carolina State Board of Health; Dr. Donald Kilgore representing the Legislative Committee of the South Carolina Medical Asociation; Dr. Marion Waters representing the Committee on Maternal Health of the South Carolina Medical Association, and the following consultants: The Honorable Daniel R. McLeod, Attorney General; Senators Rembert Dennis and Frank C. Owens; Representative Robert Turner, Mr. Jack Meadors, Executive Secretary of the South Carolina Medical Association; Mrs. Ruth Townsend, Child Welfare Consultant with the South Carolina Department of Public Welfare, and Mrs. Josephine Cannon, Director, South Carolina Children's Bureau. It was estimated that a period of up to one year would be needed to study these subjects in depth in order to make proper recommendations to the Executive Committee or the Legislature for changing the law.

The State Board of Health has requested the State Association's Committee on Industrial Medicine, composed of Doctors Hal Jameson, Chairman: Rufus K. Nimmons, Jr., H. Leon Poole, George V. Rosenberg, Joseph L. Goodman, Allen R. Slone, and Dexter M. Evans, to serve as a nucleus for an Advisory Committee on Occupational Health to the State Board of Health, along with a representative of the textile industry (James McAden), and others, including representatives from the Industrial Commission, the Departments of Labor, Agriculture, and Vocational Rehabilitation. This Committee recognized the need for a Division of Occupational Health within the State Board of Health and pledged support toward this endeavor. The State Board of Health now has a physician trained in occupational health and industrial medicine on its staff.

A Laboratory Advisory Committee has been appointed by the Executive Committee to act as an advisory group to the State Health Officer and the Laboratory Division of the State Board of Health. This Committee is composed of Doctors Albert Cannon, Claude W. Delia, DuBose Dent, E. A. Dreskin, D. W. Ellis, D. J. Grainer, John Manos, Forde McIver, and H. R. Pratt-Thomas. These members have provided much guidance to the State Board of Health in the expanding activities in the laboratory health field.

The Executive Committee also established a Dental Health Advisory Committee to advise the State Board of Health in all matters pertaining to dental health, with Dr. Howard B. Higgins, Dental



Ben Miller, M.D., Secretary

Association representative on the Executive Committee, as chairman; Dr. Fred D. Lewis, director of Dental Health of the State Board of Health, as executive secretary; Dr. Hilla Sheriff, director of Maternal and Child Health; Dr. R. W. Ball, director of Crippled Children; four dentists (one from each dental district in the State) who are engaged in the practice of dentistry in South Carolina, to be appointed by the president of the State Dental Association; and, ex officio, the State Health Officer and the President of the State Dental Association. The four dentists named by the president of the Dental Association are Doctors William Draffin, Gordon Stine, Townsend Holt, and James T. Atkins. This group will prove to be a valuable adjunct to the dental, maternal and child health, and crippled children's programs.

It is believed that these newly created advisory committees in the areas of occupational health, laboratory services, and dental health, along with the long-established advisory groups to such programs as maternal and child health, crippled children, hospital licensing and construction (Hill- Burton), heart, cancer and tuberculosis, will enhance the activities of the State Board of Health, will permit a wider interpretation of its functions, and will improve the efficiency of the Executive Committee.

The 1967 Legislature enacted the Atomic Energy and Radiation Control Act and assigned to the State Board of Health responsibility for regulation

and control of ionizing radiation sources. The act provides for a Technical Advisory Council to be appointed by the Governor, who has appointed the following members: Dr. George Brunson, representing the South Carolina Medical Association; Dr. Henry T. Little, representing the South Carolina Dental Association; Dr. U. Hoyt Bodie, representing the South Carolina Radiological Society; Mr. Robert R. Wilkie of the W. R. Grace Company, representing the Associated Industries of South Carolina; and Dr. Lyle W. Sherman, representative of the State at large "having recognized knowledge in the field of ionizing radiation and its biological effects." The duty of this council is defined as that "of advising the Department (State Board of Health) on matters pertaining to ionizing radiation and standards, rules and regulations to be adopted, modified, promulgated or repealed."

No cases of poliomyelitis occurred in the State during the year 1967. In colaboration with the South Carolina Medical Association and the South Carolina Pediatric Society, the State Board of Health has given major emphasis to measles immunization. A mass measles eradication program was begun, and it is believed that this disease has been practically eliminated from the epidemic diseases in this State. It is estimated that more than 80% of all susceptible school-aged children have been immunized through this joint statewide program and that, if during 1968 continued emphasis is given to immunizing the children of preschool age, measles will actually become another disease of the past.

A special committee appointed by the Governor to consider the future role of the South Carolina Sanatorium recommended that it be placed under the administration of the State Board of Health and converted into a chronic respiratory disease (including tuberculosis) center, providing acute, extended, and nursing home care, with extensive rehabilitation services integrated, interwoven, and coordinated into the total treatment program of the hospital.

The State Board of Health is actively participating with the Medical College and the statewide cancer and heart clinics in the development of the regional program aimed at cancer, heart disease, and stroke. Application has been made for an operational grant through this program to develop a cervical cancer screening program in cooperation with the local health departments in Florence, Darlington, and Marlboro counties.

Continued efforts are being made to safe-guard the health of our people through improving and expanding environmental sanitation activities in our State. The State Board of Health is attempting to provide uniform qualitative and quantitative inspection of restaurants and dairies throughout the State. Samples of drinking water from cities and towns in the State are being collected and brought to the State Board of Health Laboratory for examination. This is the first time that the State Board of Health has been able to perform bacteriological and chemical analyses on municipal water supplies.



Howard Stokes, M.D., Treasurer

Under a grant from the U. S. Public Health Service, the State Board of Health is surveying the State to determine the extent of the solid waste problem. In conjunction with the Public Health Service, a statewide campaign to eradicate the Aedes aegypti mosquito is being continued through control of the breeding places and through aerial and ground applications of insecticides.

The State Board of Health has experienced delays in receiving reports of births and deaths because of a serious lack of cooperation of physicians in certain areas of the State. Laxity in filing these certificates affects the quality of the statistical data. The law requires that the birth certificate be filed by the attending physician within ten days after birth, and that the medical certification in filing these records in compliance with the law is urgently requested.

Some internal reorganization of the State Board of Health is being attempted. This is designed to allow for expansion or change within designated programs, and for the addition of new programs as they are developed. It is planned that eventually there will be seven bureaus, headed by a

bureau chief, with divisions as they now exist placed under the proper bureau and headed by division directors; and with sections, placed under appropriate divisions where necessary. This plan has been approved in principle by the Executive Committee and some of the background work toward implementation has begun. Nine well-qualified physicians have been recruited and employed for the central office and county health departments. They are Dr. Donald Robinson, Dr. Judith Hood, Dr. James E. Padgett, and Dr. Harriet E. Pinner of the Central Office, and Dr. Ronald W. Penick, Greenville, Dr. Susanne G. Black, Marlboro, Dr. Cecil Jacobs who replaced Dr. L. P. Varn in Charleston, Dr. Bessie Mae Beach, M. & I. Clinic in Greenville, and Dr. Arthur Di Salvo, employed at the Communicable Disease Center, who will be the replacement for Dr. Eleanor Townsend who has retired as director of the Laboratory.

The State Board of Health in cooperation with the Medical College of South Carolina is developing a program of preceptor training in preventive medicine and public health for medical students. It is anticipated that approximately three to four externship awards a year can be given medical students for a three-month period.

The new and modern J. Marion Sims Building, in which the administrative offices and Laboratory of the State Board of Health are located, has a 300-seat auditorium and seven conference rooms, seating from 15 to 80 persons, which we wish to make available to medical and other groups for meetings, conferences, seminars, and committees.

Respectfully submitted,
W. Wyman King, M.D., Chairman

Cooperative Activities Committee

Dr. Benton Burns of Sumter, chairman of the Advisory Committee to the Woman's Auxiliary, is out of the country in Vietnam and no report is available, however he has been in active contact with the auxiliary's executive board throughout the year in connection with this work.

There is no report from the chairman of the AMA-ERF Committee. I decided to submit this report briefly as chairman of the Cooperative Activities Committee. The AMA-ERF collected $4,445.00 from members of the S. C. Medical Association during the year 1967. You will probably recognize that this is a favorable report compared to the other years. This is also as you know a voluntary contribution on the part of the members of the Association.

The work of the Cooperative Activities Committee during the year 1967-68 was done chiefly by the Sub-committees. All of our Sub-committees are Chaired by men who are interested in organized medicine in our state Association and they have each done an outstanding job. Several of these committees have had excellent programs namely



Joel W. Wyman, M.D., President-Elect

the Committee on Medical Aspects of Sports, Chairmaned by Dr. Judson Hair of Clemson and the Committee on Religion and Medicine, Chairmaned by Dr. N. B. Baroody of Florence. These public meetings have brought much favorable comment from the laymen of our state and these two gentlemen are to be congratulated along with the members of their committee on this excellent report for the year. The Committee on Public Welfare, Vocational Rehabilitation and Crippled Children's Society are well established committees headed by men of great experience and dedicated to organized medicine. These committees naturally do not have public meetings but are the real foundation of organized medicine in this state. Dr. Clay Evatt of Charleston, Dr. Ben Miller of Columbia, and Dr. Joe Waring of Charleston and their committees have again functioned well for our state Association.

Cooperative Activities Committee
Harold P. Hope, M.D., Chairman

Subcommittee on Alcohol and Drug Addiction of the Cooperative Activities Committee

The Committee on Alcohol and Drug Addiction has been quite active during the past year. We have had numerous meetings. The Committee has been active in spearheading an involuntary commitment law for the alcoholic. Through the efforts of this Committee after consultation with Council and a poll of the House of Delegates, we sponsored

an involuntary commitment law which is to come before the Legislature in the Spring of 1968. The various members of this Committee participated in two state-wide programs on the lay education of alcohol problems. The Committee has also been active in consultation with another bill for a "crown tax" on the sale of alcoholic beverages, the money to be used for treatment centers around the State.

The Committee is also drafting a statement of policy for ratification by the House of Delegates at the May Convention as well as other treatment and education programs.

Robert S. Solomon, Chairman

Mental Health Committee

No formal meeting of this committee was held during this year. There were several informal discussions between several of the members at various times during the year, particularly at meetings of the South Carolina District Branch of the American Psychiatric Association. There were several informal discussions concerning the bill for the licensing of psychologists. This bill has passed the State Legislature and is expected to be signed into law by the governor. Most of the controvesial features in previously proposed bills appear to have been resolved, and the provisions of the bill do not seem to significantly weaken the Medical Practices Act in regard to diagnosis and treatment of the mentally ill.

There has been a slow, gradual improvement and extension in the coverage of mental illness by various insurance carriers. We regret to report that the South Carolina Medical Care Plan has been the least progressive in improving insurance coverage for emotional and mental disorders. It is hoped and recommended by this committe that the South Carolina Medical Care Plan be urged to extend their coverage in this area.

James B. Galloway, M.D., Chairman

Committee on Maternal Mortality

The report of this committee was published as an article in the Journal in the February issue (Volume 64, page 41).

Mental Retardation Committee

No meeting of the Mental Retardation Committee was held during the past year since no business of any consequence was brought to my attention.

B. Owen Ravenel, M.D., Chairman

Report of the Committee on Public Relations

This committee has carried on a number of varied activities during the year. One was the staging of the annual conference of County Medical Society Officers in Columbia. This year's meeting was better attended, with some 50 persons on hand. It is felt that this meeting is a valuable one and it is regretted that more members of the Association do not take advantage of hearing discussion of affairs which are very pertinent to all of us. The programs have included discussion of such things as Medicare, Title XIX, Blue Cross-Blue Shield, commercial insurance, and other matters of a similar nature.



George D. Johnson, M.D.
Delegate to AMA

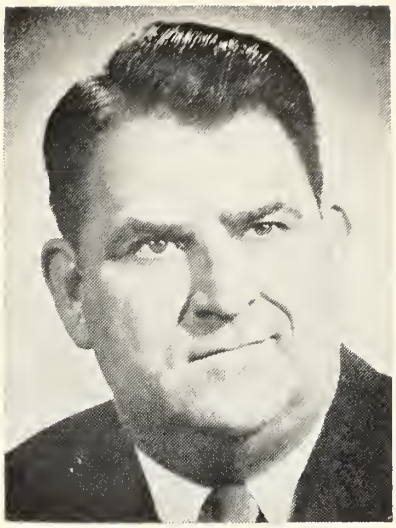
The committee has furnished to the senior medical students at the Medical College of South Carolina a leaflet detailing the types of insurance available to members of the Association and has also distributed to them the introductory pamphlet which is sent to new members of the Association.

The subcommittee on Public Information continues to function. It now supplies a weekly article to 12 newspapers of the state. Reception of the material has been good, though not all the papers publish all the articles. It is believed that this is a very useful activity. In a recent poll of reader-interest in the Charleston News and Courier, this column received a very favorable rating. This newspaper publishes the column regularly every week and the others with some less regularity.

Dr. Winston Godwin of our committee attended the AMA Communications Conference in Chicago and brought back many impressions of value to the committee.

The chairman has served on several committees of the South Carolina Hospital Association, assisting in preparation of pamphlets on cost of medical care and news codes. The first item has been distributed through our executive secretary's Newsletter to all the members of the Association and the second item has been sent to all county medical societies.

Your chairman has also worked with Mr. Elliott Taylor of the Greenville General Hospital in the



Joseph P. Cain
Delegate to AMA

preparation of exhibits of medical interest for the Greenville Health and Science Fair.

Jospeh I. Waring, M.D., Chairman

Report of the Advisory Committe to the Crippled Children Society

This committee has had no active problems this year but keeps in touch with the activities of the Society. It is recommended that this committee be continued. It meets regularly at the time of the annual meeting of the South Carolina Medical Association.

Joseph I. Waring, M.D., Chariman

Report of the Committee on Historical Medicine

For some years past the only activity of this committee has been in the matter of the production of the first and second volumes of the history of medicine in South Carolina. The second volume covering the span from 1825-1900 appeared in the latter part of the year and has been well received.

When the first volume was produced, it was sent free to all members of the Association who applied for it. Since additional funds were needed for the publication of Vol. 2 it was decided to make a charge of $3.25 for this second volume. The Association undertook to underwrite the total cost and much of the obligation has already been discharged through the sale of the two volumes.

It is recommended that this committee continue to function, perhaps in producing a third volume of history to cover the period from 1900 to nearly the present time.

Joseph I. Waring, M.D., Chairman

Report of Eye-Bank Committee

The South Carolina Eye-Bank is a non-profit organization whose function is to provide eye tissue for physicians needing it for patients with certain types of eye disorders. It performs this service without charge to the physician or the patient. In South Carolina 7,402 persons have donated their eyes for use after death by the Eye-Bank. In order to meet the increasing need for eye tissue, there should be many times this number of donors. Since January 1, 1967, the Eye-Bank has handled a total of 69 eyes, 48 of which came from S. C. donors. The remaining number were obtained from other eye-banks for use by South Carolina physicians. Sixty of these eyes were used in corneal transplant operations and the remaining nine were used for research. The S. C. Eye-Bank is a member of the Eye-Bank Association of America. This organization is under the sponsorship of the American Academy of Ophthalmology and Otolaryngology. Its purpose is to coordinate and control the standards of practice and ethics of its member eye-banks and to keep the public informed. At its Annual Meeting held in Chicago in October of 1967, the S. C. Eye-Bank was represented by Dr. Clay Evatt, Jr., Medical Director, Mrs. R. F. Neidhardt, Executive Secretary, and R. F. Niedhardt, Delegate.

John H. Young, M.D., Chairman

Advisory Committee to Dept. of Public Welfare

The Advisory Committee to the Department of Public Welfare has not been called upon for any work during the year. This completes our report.

Clay W. Evatt, M.D., Chairman

Medical Advisory Committe to the South Carolina Vocational Rehabilitation Department

(Subcommittee of the Committee on Cooperative Activities)

A mutual, beneficial, and cordial relationship exists betwen the SCMA Medical Advisory Committee and the Vocational Rehabilitation Agency. The Chairman is directly involved in the agency, and, thus is able to use the resources of the committee as a whole as well as individual members of the group in relating organized medicine to the actions of the agency.

A formal meeting of the committee with the agency was held January 18, 1968. Source information was furnished the committee by key members of the agency, including Dr. Dill D. Beckman, Director; Mr. J. E. Hammett, Deputy Director; Dr. Richard E. Hardy, Chief Psychologist and Training Officer; Dr. M. E. Borgstedt, Psychiatric Consultant; and, others.

The role of the agency in its work with the South Carolina Sanatorium was discussed by Dr. Beckman. The Governor appointed a committee

to study the future potentials of the Sanatorium. Dr. Beckman served on the committee along with Dr. E. Kenneth Aycock, Dr. William M. McCord, Mr. Burnell Sloan, and Mr. William M. Wilson. Dr. Aycock served as Chairman of the committee. The final recommendations of the committee after extensive study were as follows: It was recommended that the Sanatorium be expanded to include evaluation and care of chronic respiratory diseases and that the Sanatorium be put under the direction of the State Board of Health. The Vocational Rehabilitation Agency is to continue in its role of rehabilitation assistance to patients. The Medical Advisory Committee to Vocational Rehabilitation went on record as approving the recommendations of the Governor's Committee.

Dr. Ben Miller discussed the role of Vocational Rehabilitation Agency and other State and Private Agencies dealing with health as such activities relate to Title XVIII, Title XIX, and Title V. The contractual relationship between various agencies in implementing the Titles was discussed. Since the committee recognized that this was an active developing field the summarized material was taken as information.

Dr. Peter Gazes reported on the Regional Medical Program, directed by Dr. Charles P. Summerall. The purpose of the Regional Medical Program was stated "to improve the care of patients with heart disease, stroke and cancer through continued education and training". Dr. Beckman and other members of the agency discussed this program and it's relation to the State Agency. Dr. Kenneth Aycock, State Health Officer and member of the committee, discussed federal programs as this relates to the Department of Health as well as the State Rehabilitation Agency. He stated that efforts were being made to have the South Carolina Sanatorium certified so that it could participate in federal funds available under Title XVIII, and Title XIX.

Mr. Hammett, Deputy Director of the agency, discussed hospital costs and methods of reimbursement to hospitals as worked out by the State Hospital Association and the various State Agencies participating in health care.

The committee offers this report as information to the over-all committee, SCMA Committee on Cooperative Activities, to Council, and to the House of Delegates. It is the feeling of the commitee that it is playing an important role in relating organized medicine to State Agencies dealing in health and it is felt that this activity should be continued.

Ben N. Miller, M.D., Chairman

Legislative Committee Meeting
October 12, 1967 at 2:00 p.m.

Present were Dr. Michael F. Patton, Mr. M. L. Meadors, Donald G. Kilgore, Jr., M.D., Chairman.



Thomas Parker, M.D.
Alternate Delegate to AMA

The following items of business were considered. It was felt that another Osteopathic Bill would undoubtedly be offered this year and that we should wait for the report of the Committee of the Legislature appointed to study the osteopathic situation before taking any definite action. It was mentioned that this committee contemplated visiting a school of osteopathy. Our Committee suggests that Council might recommend that the President of USC or some other professional non-physician educator accompany this committe to assess teaching standards so that no charge of bias could be leveled against the Committee when its report is submitted.

A special committee headed by Dr. Hilla Sheriff is studying the needs of a new Abortion-Sterilization Law. It was felt that her committee should make its report before any action by the Legislative Committee is taken.

Sample bills were studied concerning making blood transfusion a medical service rather a commodity with an implied warranty. It was felt that the recently passed Tennessee Law which includes not only blood and blood products but also all human tissue (bone, corneas, etc.) would be more desirable for South Carolina. The Committee urged that the Coroner-Medical Examiner Bill previously approved by the Council and House of Delegates be actively supported and passed this year. A law concerning advertising by members of the healing arts from Kentucky was felt to have many desirable features. The Committee felt this act should be examined by Council and if they also favored it, it should be introduced into the next Legislature. The Chairman asked Mr. Meadors to supply him with a list of the County Medical Society Officers in order to revise the list of key men to contact the Legislature this year when it became necessary.

There being no further business, the meeting was adjourned.

Donald G. Kilgore, Jr .,M.D., Chairman

Supplementary Report

No more formal meetings of the committee have been held. Apparently no new osteopathic legislation will be brought up this year because of the recommendation of the Osteopathic Investigation Committee appointed by the legislature last year.

S754 introduced by Senator Frank C. Owens at the request of the Association would dispense with the legally "implied warranties of merchantability and fitness" in connection with a contract for the sale, procurement, distribution, etc. of blood and its derivatives and other human tissues and define the transplanting, transfusion, and other transfer of such substances as "a medical service". This bill would protect the physician from being liable because of inadvertent transfer of organisms or disease existent in the blood or tissue transfused or transplanted. This bill has passed the Senate and awaits action by the House of Representatives at the present time.

S737 preventing advertising by professional men was introduced into the Senate but has met strong opposition from the chiropractors. At this time a public hearing has been requested before the Judiciary Committee.

Other bills of interest in the medical profession are a provision for a licensing board for psychologists and a redefinition of the practice of podiatry. These bills are presently under study in the medical affairs committee of the Senate.

Donald K. Kilgore, Jr., M.D., Chairman

Mediation Committee

An organizational meeting was held in May 1967 following the meeting of the South Carolina Medical Association. Dr .Swift C. Black was elected President, Dr. Francis P. Owings was elected Vice President, Dr. Donald G. Kilgore, Jr. was elected Secretary. No further business was transacted at this meeting.

On November 1, 1967 a meeting of the Mediation Committee was held following the joint meeting with the Medical Specialty Consultants. At this meeting five cases were discussed, and appropriate action was taken. No further meetings were planned until the annual meeting of the South Carolina Medical Association in May, 1968.

Donald G. Kilgore, Jr., M.D., Secretary

Minutes of SCMA Mediation Committee and Medical Specialty Consultants Meeting

A meeting of the SCMA Mediation Committee and Medical Specialty Consultants was held in the Board Room of the Blue Cross—Blue Shield Building on November 1, 1967 at 1:30 P.M. The following physicians were present:

Mediation Committee



John Hawk, M.D.
Alternate Delegate to AMA

W .A. Black, M.D.
R. G. Latimer, M.D.
Donald G. Kilgore, Jr., M.D.
Max A. Culp, M.D.
Swift C. Black, M.D.
John W. Rheney, Jr., M.D.
Francis P. Owings, M.D.

Medical Specialty Consultants

Erwin C. Nolte, M.D.
Leon S. Bryan, M.D.
C. H. Peebles, M.D.
(for Edward D. Hopkins, M.D.)
R. L. Crawford, M.D.
W. W. Ledyard, M.D.
Rodney Fitzgibbons, M.D.
J. B. Galloway, M.D.
George W. Brunson, M.D.
Daniel W. Davis, M.D.
Richard C. Slocum, M.D.
Plan personnel present:
William Sandow
Gene Porter
Gene English
Linwood Davidson
Margaret Fewell
Leslie Patterson
Jack Henley
Dorothy Reeder

Bil Medlin
Willene Varnadoe
Pat Brazell
Karl Yager

Also present were Dr. C. J. Lemmon, Jr., Medical Director of Blue Shield of South Carolina and Dr. J. Hal Jameson, President of Blue Shield Board of Directors.

Dr. Swift C. Black, Chairman of the Mediation Committee, called the meeting to order and asked Dr. Wells to lead in prayer. Inasmuch as no objections were voiced, Dr. Black dispensed with the reading of the minutes to conserve time. He mentioned that the pertinent points in the minutes would be brought up in this meeting. He then turned the meeting over to Mr. Jack Henley, Manager of Professional Relations Department of Blue Shield of South Carolina.

Mr. Henley stated that Blue Shield of South Carolina, acting as Carrier for Part B of Medicare, has been given the responsibility of determining reasonable charges under the Program and that certain guidelines to establish the "reasonable charge" are set by SSA. In its first efforts to establish the reasonable charge, the Underwriting Department had very little charge data available. The PSI (Professional Service Index) was used to calculate payments for Part B of Medicare at that time, setting the unit value to correspond with the expected charge of South Carolina physicians. Ninety-seven percent of the procedures were found to be reasonable under the reasonable charge established by this method. At a meeting of the Mediation Committee eight months later, it was found that there was still insufficient data to base the calculations on the actual charges submitted by physicians throughout the state, and another meeting was scheduled for September of this year, which was postponed until today's date.

Mr. Henley then explained the procedure now being used to make payment under Part B, which has been approved by SSA. This involves two criteria: No. 1—Customary charge. This is the charge the physician most frequently charges all his patients. Criteria No. 2—Prevailing fee. This fee is the usual rate charged for similar services by physicians of one specialty in one locality. The customary charge will be paid for a procedure unless the customary charge exceeds the prevailing fee.

Dr. Dan Davis asked how often the customary charge was changed, or if it was kept current. Mr. Henley answered that if Medicare is notified of a change in charge by a physician, the change would be made effective thirty days following date of notification.

The matter of "areas" was discussed. Mr. Henley stated that population is the determining factor involved as the law requires a geographic area distinction. South Carolina is divided into three areas; metropolitan, urban and rural. Mr. Henley read a list of the counties which composed each of the three areas. It was noted that the area in which a physician provided services is irrelevant since the physician is paid according to his charge, unless this charge exceeds the prevailing fee. The prevailing fee schedules will be reviewed annually.



William Perry, M.D.
Chairman of Council

Dr. Dan Davis asked what method is used to establish a charge for a rare procedure which has not been coded. Mr. Henley answered that queries would be sent to those physicians who would most likely have performed the same procedure to obtain their charge. From all information available, proper steps would be taken to insure the correctness of a reasonable charge for the procedure. Dr. Davis also inquired if charges of physicians at the Medical College were included in the calculations, to which Mr. Henley replied that charges of all hospital-based physicians are excluded.

Mr. Henley asked that the physicians refer to the packet each had received and look at the letter and individual profiles included. He explained that these packets would be sent to all physicans requesting that any discrepancies be corrected, and a copy was to be retained in the physician's office and a copy returned to Medicare. Dr. Black inquired if Blue Shield as Carrier for Part B of Medicare intended to assign a procedure code when these profiles were returned by the doctors. Mr. Henley replied that procedure codes would be assigned and a manual distributed to South Carolina physicians. Dr. Davis observed that this would be of value since it appeared to be evident that many of the problems have been created by misunderstanding and misinterpretation of terminology. At this point there was a general discussion regarding the proper method of filing claims for procedures done in a doctor's office, and those done in a hospital. Mrs. Pat Brazell responded to questions from the floor in this regard.

Mr. Sandow mentioned that one of the issues before the Legislature now has to do with filing of

outpatient claims, but would probably not be resolved before 1968.

Dr. Dan Davis inquired about the possibility of the physician being sent a statement of the amount paid the beneficiary by Medicare in non-assignment cases. Dr. Black asked how much additional paper work would be involved in sending this information to the doctors. Mr. Sandow injected the thought that this would be a question of whether Medicare would consider this as an allowable operating cost. Mr. English stated that this was not an allowable cost under our present cost apportionment, and clearance would be necessary from SSA. He added that from past experience, he did not feel this would be granted. Dr. Black asked about the regularity of meetings between SSA and Medicare Carriers. Mr. English stated that Regional Meetings were held and that SSA could be reached by telephone at any time.

Dr. Davis commented that he felt one particular problem area in which physicians could be of tremendous help is the proper itemization of receipts given to patients. He pointed out that if lack of information is given, the possibility of this procedure falling into another category would be quite possible, and in some cases the patient would not receive the correct reimbursement. Dr. Davis questioned how he could inform his patients on the proper method of filing Medicare claims. Mr. Henley mentioned the workshops that have been held to assist doctors and medical assistants in claims filing, and the Medicare Manual which is available. He emphasized that in addition, all personnel would be glad to help at anytime requested.

Dr. Ledyard asked where the refund should be sent if a patient is covered by Medicare and Blue Shield and the payment to the doctor exceeds the bill. The answer given by Mr. Henley was that the patient should receive the refund as Blue Shield pays without regard to Medicare and the overpayment belongs to the patient. Dr. Black asked how Medicare would reimburse when a patient had other coverage. Mr. English advised that the Medicare Law states that Medicare is primary. Therefore, Medicare would pay regardless of other coverage. Mr. Patterson noted that there would be cases where there would be no overpayment involved, for example, subscribers who carry Blue Shield FEP. Dr. Wells inquired how payment could be expedited in such instances. Mr. Patterson replied that both claims should be submitted at the same time, since the amount of payment under Blue Shield FEP is dependent upon the amount Medicare pays.

Dr. Davis stated that he is not being paid the same way he was a few months ago, and added that if Medicare is going to downgrade payments, he felt the doctors should be notified. Mr. English stated that no payments had been downgraded, and that the difference in payment might be due to the fact that some claims were filed by procedure while others were filed by time. Mr. English emphasized if the claims had been filed in the same manner, the payments would have been the same.

Dr. Slocum reiterated Dr. Davis's comment with regard to accurate itemization of receipts for paid bills by the physician's office, stating that he felt this would obviate many problems.

Dr. Davis asked if adjustments in charges were to be made retroactive. Mr. English said they would make adjustments in charges retroactive on request for the interim period only. Adjustments will not be made on a continuing basis.

Dr. Slocum inquired if it would be possible for the $50.00 deductible for Part B of Medicare to be spread over several physicians and Mr. English commented that we have no control over this. Mr. Sandow commented that the deductible has caused a great deal of worry and confusion and that many suggestions have been made in the legislative sessions in this regard, mainly that the deductible be completely done away with and that Medicare operate on an across the board co-insurance. No final action has taken place in this regard.

Dr. Black adjourned the meeting after asking if anyone had any further questions or comments to make.

Donald G. Kilgore, Jr., M.D., Secretary

Medical Services Committee

This is a new committee, having been formed by Council a year and a half ago. Its duties and functions were quite broad, comprehensive and overlapping with other previous standing committees, making it difficult to formulate any specific assigned tasks. At the time of the Medical Services Committee's first report in May, 1967, certain recommendations of a broad nature were made. This year the committee has undertaken to observe the changes that are occurring in the practice of medicine as it is being affected by the changing positions of the physician, patient and the third parties such as private insurance carriers, government insurance organizations, Blue Shield and Medicare. The chairman and committee members have tried to observe and influence such operations. Recently the committee itself has been enlarged to further this effort and also in hopes of obtaining a quorum at called meetings. We wish to report a closer cooperation between the above groups mentioned and an effort toward a better understanding between the various parties involved. It is to be noted that Blue Shield in its own operations and as the fiscal agent for Medicare is attempting in every way possible to cooperate with the medical profession. The South Carolina Industrial Commission have raised their fees to a realistic level. The OSIA and Vocational Rehabilitation Department are making an effort to do the same and their fees compare favorable

with those in other states. We have to report that unfortunately the State Board of Health at present will play only a secondary role in the administration of Medicaid under Title 19. Much work remains to be done in the field of Medicaid before we think it will become a satisfactory, workable program in this state.

At the present time this committee is in the process of trying to determine the various methods by which the charity patient is being handled under the varied conditions in the forty-six counties of the state. We also are obtaining information as to the present status of the organization and promulgation of emergency medical care in the individual counties of the state. A further report will be made after the informaion we are presently obtaining can be analyzed.

A. Izard Josey, M.D., Chairman

Committee on Industrial Medicine

The Industrial Fee Schedule which occupied most of the time of this Committee during 1966-67 went into effect January 1st. of this year. While it is too soon to tell the full impact of the schedule at this early date it is felt by the Committee that it will result in a considerable increase in fees to those doctors handling industrial cases in this state.

At the request of Dr. Kenneth Aycock, State Health Officer, this Committee met with representatives of the State Health Department October 4, 1967. The purpose of this meeting was a discussion of the feasibility of establishing a division in the department for occupational health and injury control. It was pointed out that rules and regulations relating to industries in South Carolina were last published in 1958. Many of these are now found to be obsolete and incomplete and there is need for updating these and a program of enforcement to be instituted. Further meetings between the Committee on Industrial Medicine and the State Health Department will be scheduled this year.

There will be a meeting of the Committee on Industrial Medicine with the South Carolina Industiral Commisison on March 27, 1968. The purpose of this meeting is to review the Industrial Fee Schedule as it has functioned so far this year; to relate to the Commission some of the problems concerning compensation cases, and, in general to establish a better rapport between the doctors of the state and the Industrial Commission.

The selection of an advisory committee to work with Dr. Harold Jervey is about complete and it is hoped that this can be functioning before the year is out.

J. H. Jameson, M.D., Chairman
Respectfully submitted,

Committee on Infant and Child Health

The committee on Infant and Child Health held no formal meeting during the past year. However, at different times there were conferences between some of its members and a project seems to be taking shape.

One of the statutory requirements of The Social Security Act, as amended Section 505(a) requires each state to have a plan which provides for early identification of handicapping conditions of children, especially in the low income families.

The support and active assistance of this committee will be essential in developing a plan with the state and local health departments for carrying out this mandate and in suggesting methds for referrals and appropriate treatment for these children.

One problem with which this committee has been concerned during the past couple of years is that of implementing the state law for mandatory PKU testing of newborns. During the past year rules and regulations regarding PKU testing have been completed and distributed.

Respectfully submitted,
Casper E. Wiggins, M.D.,
Chairman

COMMERCIAL EXHIBITORS

COMPANY	SPACE NO.
Geigy Pharmaceuticals	1
Columbia Brace Shop	2
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Palmedico, Inc.	6
Floyd Brace Company	7
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EXHIBITORS

Geigy
Space No. 1

Geigy Pharmaceuticals cordially invites members and guests of the association to visit its exhibit. The exhibit features important new therapeutic developments in the management of cardiovascular disease as well as current concepts in the control of inflammation, hypertension and edema, depression, obesity, and other disorders, which may be discussed with representatives in attendance.

Columbia Brace Shop
Space No. 2

The Columbia Brace Shop will display Scientific Comfort shoes and orthopedic braces and supports.

S. E. Massengill Company
Space No. 8

The S. E. Massengill Co. of Bristol, Tenn. will have a display.

Pepsi-Cola
Space No. 32

Pepsi-Cola Bottling Company invites all doctors and their wives to stop by booth No. 32 for a cold Pepsi-Cola.

CIBA
Space No. 40

Esimil (R) (10 mg. guanethidine monosulfate and 25 mg. hydrochlorothiazide CIBA) is a new antihypertensive indicated for almost all forms of fixed and progressive hypertensive disease, and for sustained hypertension which cannot be controlled with simpler agents.

Lakeside Laboratories

Exhibit features the theme "early recognition and rapid improvement of depression" and shows how to save valuable case history taking time by way of an easy to use depression rating scale and Lakesides rapid acting antidepressant—Norpramin.

Parke-Davis
Space No. 3

Medical service members of our staff will be in attendance at the Parke-Davis booth to discuss two



new products—Norlestrin(R) 1 mg., an oral contraceptive and Ponstel (R) (mefenamic acid), an oral analgesic.

Palmedico, Inc., Ethical Pharmaceuticals
Space No. 6

PALMEDICO invites you to visit space No. 6 where we will feature:

AMPHAPLEX—the "DIFFERENT" anti-obesity product, BESTA—Therapeutic Multivitamin, PALOHIST—Antihistamine-decongestant.

Floyd Brace Company
Space No. 7

Floyd Brace Co. of Charleston, S. C. will display the latest line in lumbosacral supports, dorsolumbar supports, hip abduction splints, mastectomy sleeves and prosthesis and traction equipment.

Powers and Anderson
Space No. 25

Will exhibit: W. A. Fiber Optics Sigmoidoscope, Pocket Set Ophthalmoscope, Otoscope set, baby scales, Pelton Autoclave, Sklar stethoscope, Hope Resuscitator, Adjustable Stool, Wall Mounted Sphygmomanometer, Hyfrecator, Ames Diagnostic Products and Handi Vent. Salesmen in charge of exhibit will be Robert Ritter and Hampton Howard.

Winchester Surgical Supply Company
Space No. 33

WINCHESTER SURGICAL SUPPLY COMPANY
"Carolinas' House of Service"
Distributors of KNOWN BRANDS of PROVEN QUALITY

WE SERVICE WHAT WE SELL

Serving the Medical Profession of South Carolina since 1919. This will be our 48th consecutive meeting to attend and exhibit.

We invite you to visit our booth No. 33 where you can see and examine the latest in Instruments and Scientific Apparatus. Emory Floyd, Ray Jackson and R. Murphy Conder will be there to greet you.

AYERST Laboratories
Space No. 11

AYERST Laboratories extends an invitation to visit our exhibit where ATROMID-S and PREMARIN are being featured. Our representatives will be pleased to discuss these or other AYERST products with you.

Mallinckrodt Pharmaceuticals
Sapec No. 12

SONILYN^{R}—(sulfachlorpyridazine)—A short-acting sulfonamide specifically designed to treat acute and chronic urinary tract infections.

BARBIDONNA^{R}—(Phenobarbital & Natural Belladonna Alkaloids)—for spasmolysis and sedation.

Mead Johnson Laboratories
Space No. 13

The Mead Johnson Laboratories' exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about their products .

Endo Laboratories Inc.
Space No. 14

Endo Laboratories will present the latest clinical information relating to our products, COUMADIN (SODIUM WARFARIN), NUMORPHAN (OXYMORPHONE—HCL), PERCORAN, PERCODAN—DEMI, HYCOMINE, HYCOMINE-COMPOUND, HYCODAN, VALPIN (ANISOTROPINE METHYLBROMIDE), VALPIN-PB (ANISOTROPINE METHYLBROMIDE with PHENOBARBITAL), PERCOGESIC, PERCOGESIC-C.

ORTHO Pharmaceutical Corporation
Space No. 15

ORTHO* is proud to present the most complete line of medically accepted products for control of conception and the treatment of vaginitis.

General Electric
Space No. 17

We will have on display our Cardiac and General Intensive Care Systems.

ACTA-FAX Business Machines
Space No. 18

Acta-Fax Business Machines will feature again this year the fabulous Savin "Sahara 200", the machine that "Copies to Size". Also, a new low price compact electro-static copier, the Electrocopy 400, will be on display for physicians who have a small copy volume.

All these machines make permanent copies and no color of ink is restrictive. The machines are excellent for copying statements, insurance claims, laboratory reports and ECG's etc.

Smith, Miller & Patch, Inc.
Space No. 19

Smith, Miller & Patch, Inc. will appreciate an opportunity to discuss with you our recently enlarged line of hematinic tablets including Vitron, Vitron-C and Vitron-C plus; and many of our ophthalmic products for ocular conditions encountered in General Practice, our new, fast-acting, well tolerated NASOCON NASAL SPRAY; and a new non-barbiturate hypnotic, SOMNAFAC Capsules.

Warner-Chilcott
Space No. 20

The following products are to be featured at the South Carolina Medical Association meeting.

Coly-Mycin^{M} Injectable
Mandelamine
Pre-Sate

Sealy of the Carolinas, Inc.
Space No. 23

Sealy of the Carolinas will display the brand new $89.95 version of Posturepedic Innerspring at the annual convention in May. This merchandise is available in both EXTRA FIRM and GENTLY FIRM grades, and is offered, as in the past, to members of the medical profession, for their own use, and for that of members of their families, at the same basis of special pricing that has been in effect for at least twenty years.

Sealy merchandise is accepted for advertising in Journals of the American Medical Association.

ASTRA Pharmaceutical Products, Inc.
Space No. 26

"Information and descriptive literature pertaining to Xylocaine (lidocaine) and Citanest (prilocaine) local and topical anesthetics, and iron preparations Astrafer (dextriferron) for intravenous use and Jectofer (iron sorbitex) for intramuscular administration will be available at the Astra booth."

William P. Poythress & Company, Inc.
Space No. 29

The Poythress exhibit will feature Trocinate, a

unique, direct-acting (musculotropic) antispasmodic drug, and the Mudrane combinations, established Poythress products for relief of bronchial asthma. Solfoton, Solfo-Serpine, Panalgesic and Synirin will also be featured. Your requests for literature and professional trial quantities are cordially invited.

The Stuart Company
Space No. 30

The Stuart Company will be featuring our new anti-anginal product, SORBITRATE, at the 1968 SCMA convention. We will also have a display of MYLANTA, DIADOSE, and DIALOSE-PLUS. Complete information and sample request cards will be available throughout the meeting.

A. H. Robins Company
Space No. 34

You are cordially invited to visit the Robins display and meet our representatives who will welcome the opportunity to discuss products of interest with you.

Merck Sharp & Dohme
Space No. 35

The Merck Sharp & Dohme exhibit has been designed to supplement the physicians therapeutic armamentarium. Technically trained personnel are present to discuss the scope and variety of services offered.

G. D. Searle & Co.
Space No. 36

You are cordially invited to visit the SEARLE booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be information on Ovulen-21, Enovid, Aldactazide, Flagyl, Lomotil, Pro-Banthine and other drugs of interest.

Schering Laboratories
Space No. 37

Schering Laboratories invites you to visit their exhibit, Booth Space No. 37, where their representatives will be available to discuss with you any questions you may have on TINACTIN (R), AFRIN (R), ETRAFON (R), GARAMYCIN (R), VALISONE (R), GITALIGIN (R), CELESTONE (R) SOLUSPAN (R) Injection or any other Schering product.

Breon Laboratories
Space No. 38

Breon Laboratories Inc. presents a full line of products for the care of patients with chronic obstructive pulmonary diseases. Included are ALEVAIRE, BRONKOMETER, BRONKOSOL, BRONKOTABS, BRONKOLIXIR and BRONKEPHRINE. Supplying a variety of formulas, dosage forms and actions; these products offer both prophylaxis and therapy, in chronic or acute conditions, to all ages. Breon personnel will gladly discuss specific products and therapies with you.

Smith Kline & French Laboratories
Space No. 39

Representatives will be on hand to answer your specific questions and provide information on their products and services.

Arnar-Stone Laboratories, Inc.
Space No. 41

AMERICAN TOPICAL ANESTHETIC—20% dissolved benzocaine in a water-soluble base—ointment, suppositories and aerosol forms.

SOPOR—Non-barbituate hynotic sedative for gentle untroubled sleep. Particularly useful with geriatric patients.

ISOCLOR—oral nasal decongestant and bronchodilator—tablet, liquid and timesule forms, also the anti-tussive Isoclor expectorant.

Foreign body perforation of Meckel's Diverticulum—Harry Gregorie, M.D., Kenneth H. Herbert, M.D. (Charleston) Amer Surg 33:231-233 May 1967.

Foreign body perforation is one of the rarest complications involving Meckel's diverticulum. Less than 40 cases have been reported. The 6th case of perforation by wooden splinter is described. It is unique and interesting because of the chief pain radiating to the penis caused by irritation of the base of the urinary bladder. Important aspects of the clinical features of perforated Meckel's diverticulum are presented from review of the literature. Exploration of the ileum for complicated Meckel's diverticulum is advised at operation for suspected appendicitis when only peri-appendicitis is found.



t's be specific about Campbell's Soups...
and *reducing diets*



There are more than 30 million people in America who are overweight. During the next year, you probably will see more than 1,000 of them in your own practice.

One good way to help these patients is to give them a reducing diet based on ordinary eating patterns.

Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



To obtain a supply for your office write to:
Campbell Soup Company, Box 265, Camden, N. J. 08101

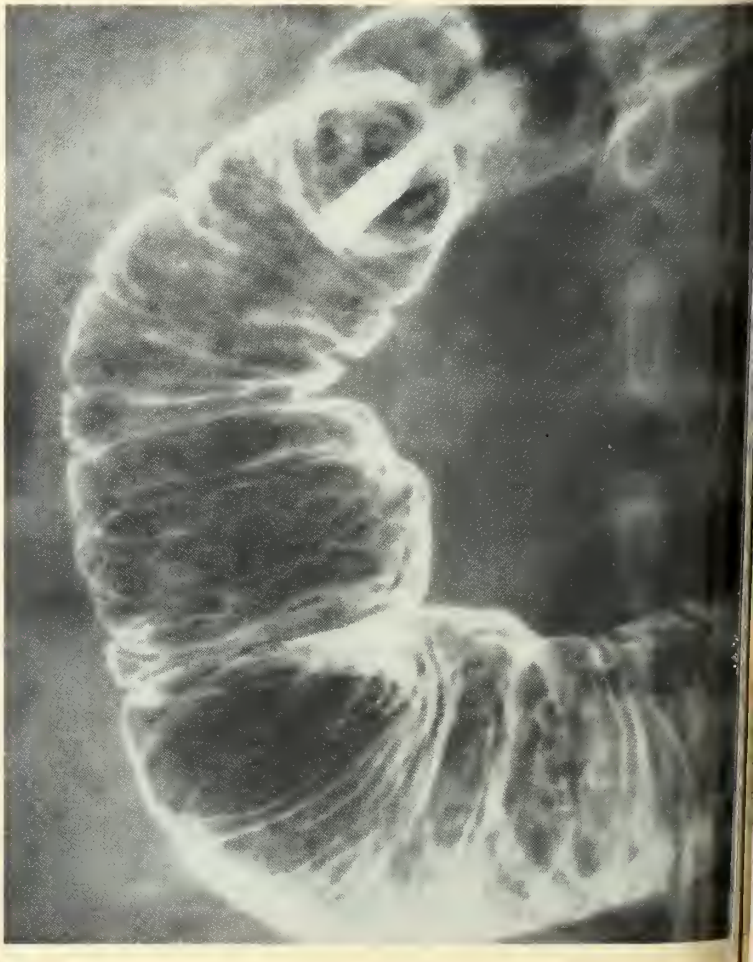
Conventional Radiography

The restless duodenum makes radiographic diagnosis difficult, uncertain and often unproductive: Is this duodenum abnormal?



Hypotonic Duodenography

Pro-Banthīne-induced duodenal calm permits full anatomic appraisal: Same patient. Duodenal normality is now evident.



in diagnosis
in treatment

Pro-Banthine® brand of propantheline bromide

calms the gastrointestinal tract

r fifteen years Pro-Banthine has been the st widely used anticholinergic agent in iorders of gastrointestinal motility and tric hypersecretion. More recently Pro-nthine has reestablished its pharmaco-ic effectiveness in diagnostic procedures ng intragastric fibroscopy and hypotonic ntgenography.

v the X-rays were taken

he hypotonic duodenograph[1,2] repro-ed above, the gastrointestinal tract was xed with Pro-Banthine. The duodenum intubated. Pro-Banthine in a dose of 60 intramuscularly was used to assure mpt aperistalsis and double-contrast vis-zation was achieved with ordinary bar-and air.

he same pharmacologic efficiency has ed of pronounced value in such condi-s as: *peptic ulcer, pylorospasm, biliary inesia, functional hypermotility and ir-ble colon.*

raindications: Glaucoma or severe cardiac ese.

utions: Since varying degrees of urinary hesitancy may occur in elderly males with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27—Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology *89*:438-443 (Sept.) 1967.

SEARLE

Research in the Service of Medicine



"Breathing's a snap again," he said gingerly.
(COMPLIMENTS OF DIMETAPP)

Help clear up that miserable stuffed-up feeling with Dimetapp. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done... in a hurry.

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500

A.H. ROBINS COMPANY
RICHMOND, VA. 23220
A·H·ROBINS

in sinusitis, colds, U.R.I.
Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

up to 10-12 hours clear breathing on one tablet





the spasm reactors your practice deserve

"the Donnatal® Effect"

	each tablet, capsule or 5 cc. of elixir (23% alcohol)	each Donnatal No. 2	each Extentab®
mine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
rbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.

g: may be habit forming)

A. H. ROBINS COMPANY, RICHMOND, VIRGINIA 23220

Brief summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

A·H·ROBINS

TWO WAYS TO GIVE YOUR PATIENTS A MONTH'S SUPPLY OF THERAPEUTIC VITAMIN C:

45 CABBAGES OR 30 ALLBEE WITH C



Your patient would have to eat 45 cabbages a month (1-1/2 a day) to get as much vitamin C as is contained in just one bottle of 30 Allbee with C capsules (taken one capsule daily). In addition, each capsule provides full therapeutic amounts of the B-complex vitamins. For example, as much niacin as 2 pounds of sirloin steak.

Write "30" for B and C deficiencies. This handy bottle of 30 Allbee with C capsules gives your patient a month's supply at a very reasonable cost. Also the economy size of 100. Available at pharmacies on your prescription or recommendation.

A. H. Robins Company, Richmond, Va. 23220.



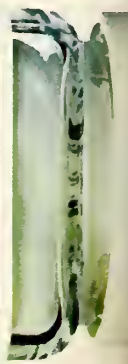
A·H·ROBINS

30 Capsules

Allbee® with C

Each capsule Contains:

Thiamine mononitrate (Vit. B_1)	15 mg
Riboflavin (Vit. B_2)	10 mg
Pyridoxine hydrochloride (Vit. B_6)	5 mg
Niacinamide	50 mg
Calcium pantothenate	10 mg
Ascorbic acid (Vit. C)	300 mg



Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient's sodium excretion is greatly enhanced. Yet potassium loss is low

The therapeutic action is smooth, and persists for a full 24 hours With Enduron you can prescribe convenient once-a-day dosag without skimping your patients on day-long thiazide effectiveness

Of course, as with all thiazides, supplemental dietary potassiur should also be considered.

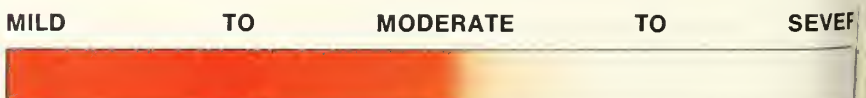
Use Enduron as a basic therapy in patients with mild to moc erate hypertension. A single 5-mg. tablet each day is ample i most cases.

Once a day, every day

ENDURON

METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVEF



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

Once a day, every day

ENDURONYL

METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

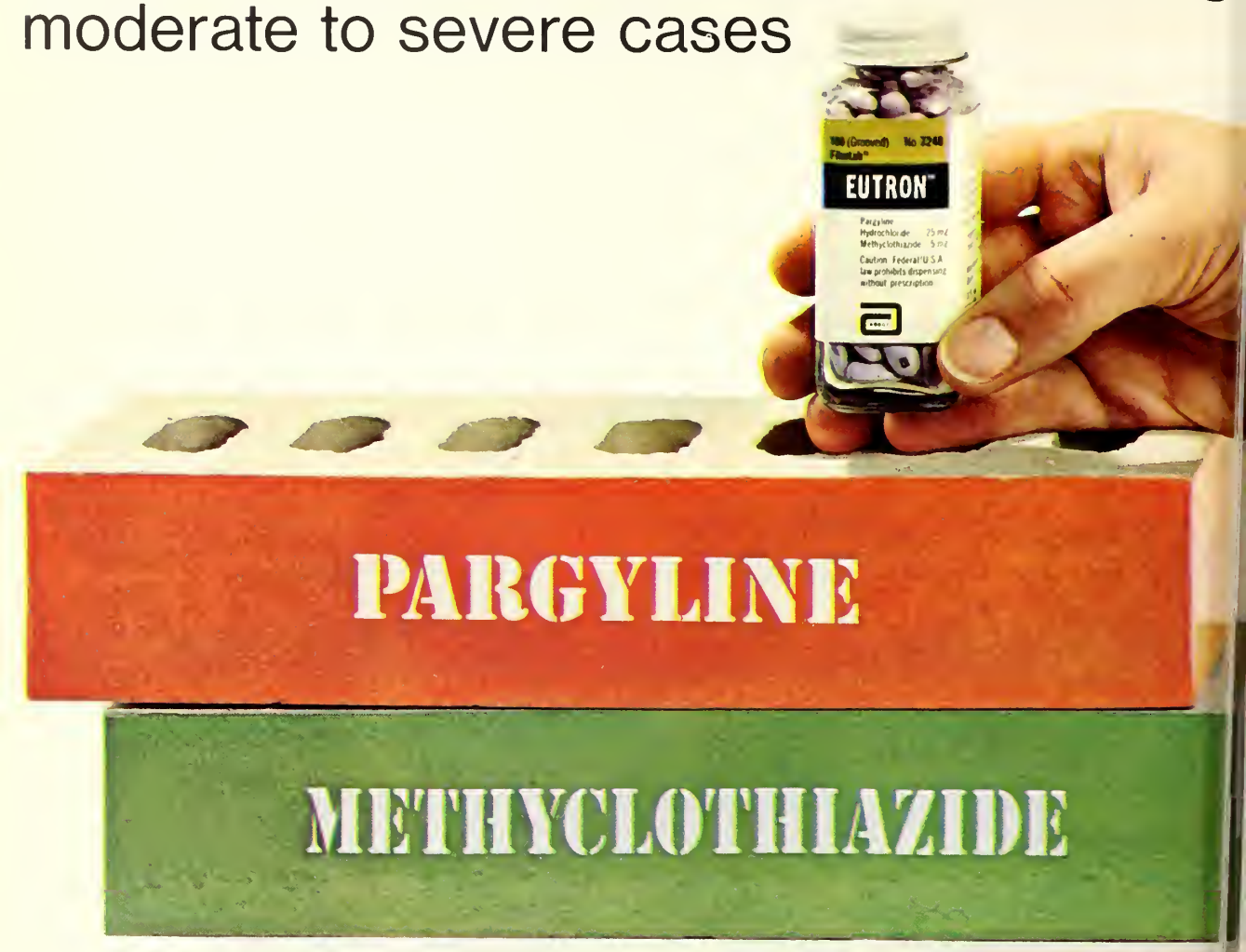
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether you patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings we reduced from 112 pre-treatment to 90 post-treatment; *sitting* fro 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were near alike in all three body positions.

Use Eutron for managing your moderate to severe cases. building blocks enhance each other; hence lesser doses often suffic

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVE



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug.

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Indications For mixed infections which are more susceptible to the combination than to either agent alone. These may include susceptible gram-positive and/or gram-negative mixed infections. Not recommended in the treatment of infections expected to respond to full therapeutic doses of the antibiotic or sulfonamide alone.

Contraindications Known hypersensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, in premature or in newborn infants during first week of life.

Warnings As with other forms of sulfonamide therapy, use only after critical appraisal in patients with liver or kidney damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests when used intermittently or for long periods.

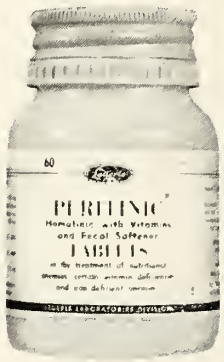
Precautions, Side Effects Use sulfonamides with caution in patients with a history of allergy, including asthma. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent; if encountered appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. In prolonged therapy, or when high dosage is used, maintain an alkaline urine. If oliguria occurs, discontinue therapy. Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin; generally improved by reduction of dosage.

If overgrowth of nonsusceptible organism occurs, withdraw the drug and institute appropriate treatment.

Adverse Reactions Sulfonamide therapy may be associated with headache, nausea, vomiting, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, urticaria, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria. 803446

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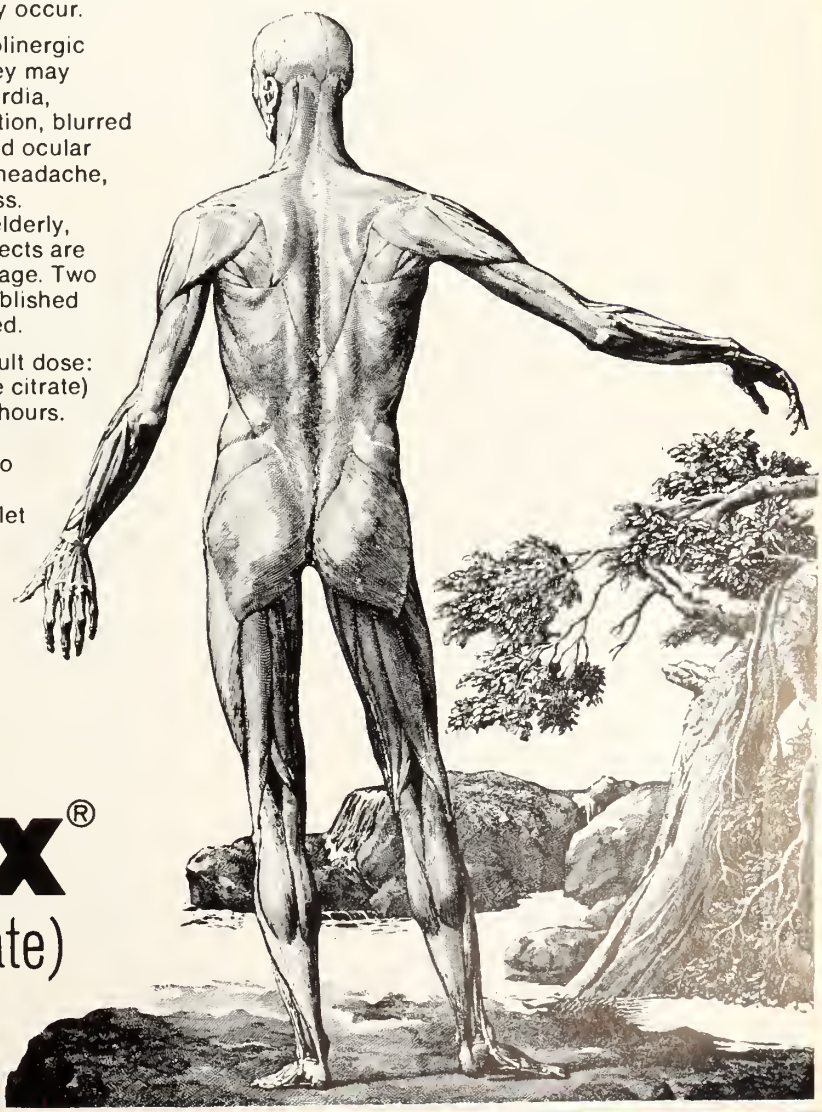
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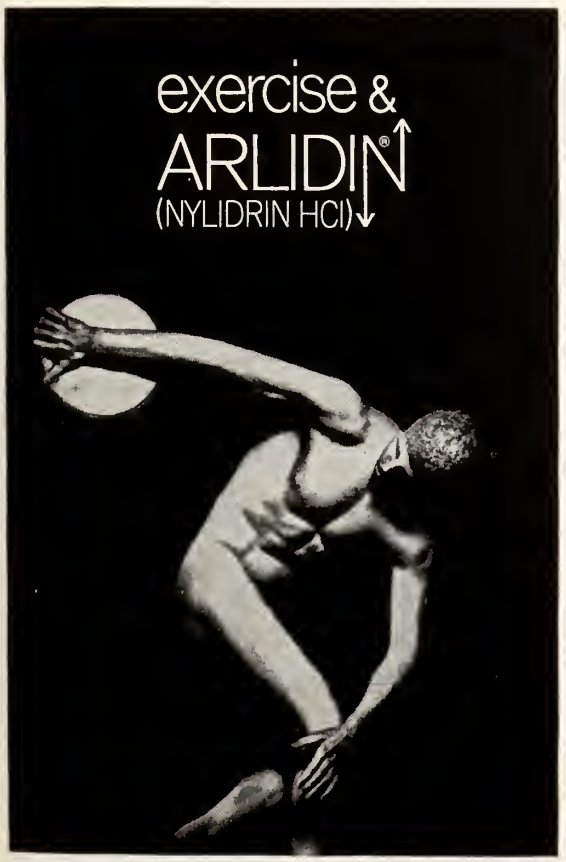
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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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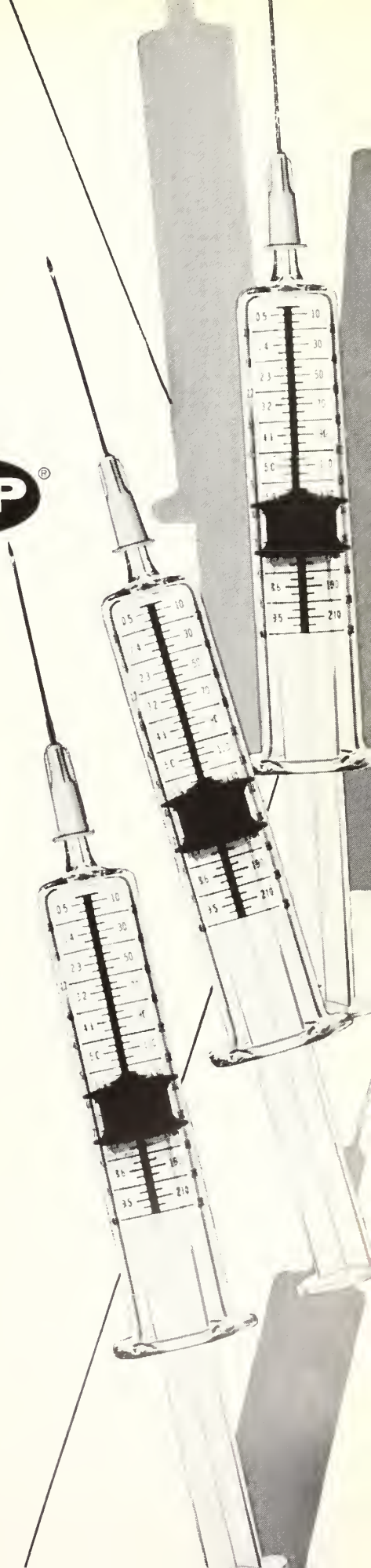
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Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep addiction-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, lactation or in women of childbearing age requires that potential benefit be weighed against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium, such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Employ usual precautions in the severely depressed or in those with latent depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856



When eating fads of teens or tots Lead to a sudden case of "trots"

Parepectolin for quick relief of acute diarrhea
... soothes colicky pain with paregoric*
... consolidates fluid stools with pectin
... adsorbs irritants with kaolin, and protects intestinal mucosa

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:

*Paregoric (equivalent)	(1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.	
warning: may be habit forming	
Pectin	(2½ grains) 162 mg.
Kaolin (specially purified)	(85 grains) 5.5 Gm.

(alcohol 0.69%)

Usual Children's Dose: One or two teaspoonfuls three times daily.

ROER

WILLIAM H. RORER, INC.
Fort Washington, Pa.

When it's more than a bad cold



your patient can feel better while she's getting better

Achrocidin®

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

In bacterial/allergic u.r.i., ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the tetracycline-sensitive organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals.
Contraindications: History of hypersensitivity to any component.
Warning: If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment, which should be discontinued at first evidence of skin discomfort.
Precautions: Some individuals may experience drowsiness, anorexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development may cause discoloration of teeth.
Adverse Reactions: Gastrointestinal—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity; onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels following full therapeutic dosage has been reported. This has disappeared rapidly when drug was discontinued. Teeth—dental staining (yellow-brown) in children of mothers given tetracycline during the latter half of pregnancy and in children given the drug during the neonatal period, infancy, and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Lederle

527-8

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

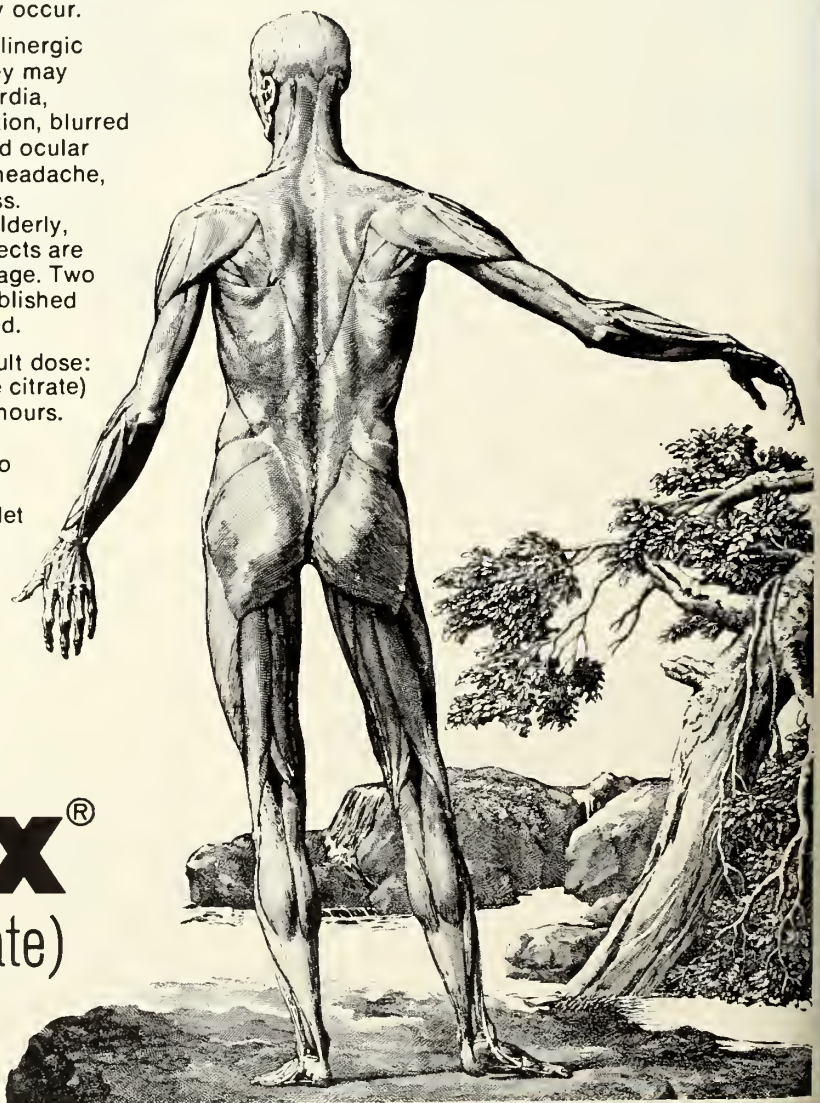
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
Northridge, California 91324



Norflex®
(orphenadrine citrate)

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient's sodium excretion is greatly enhanced. Yet potassium loss is low

The therapeutic action is smooth, and persists for a full 24 hours With Enduron you can prescribe convenient once-a-day dosag without skimping your patients on day-long thiazide effectiveness

Of course, as with all thiazides, supplemental dietary potassiun should also be considered.

Use Enduron as a basic therapy in patients with mild to moc erate hypertension. A single 5-mg. tablet each day is ample i most cases.

Once a day, every day

ENDURON

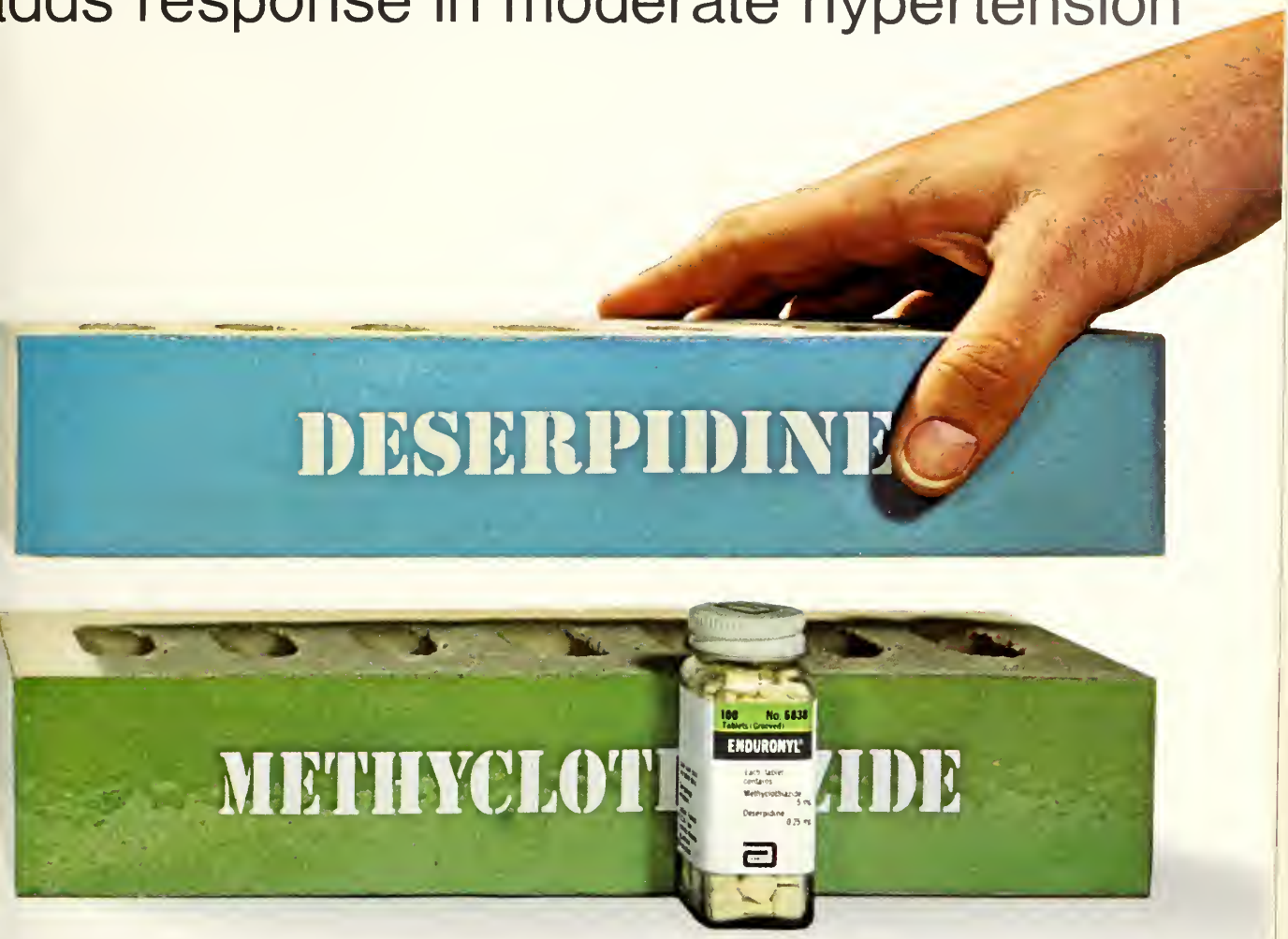
METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVER



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

nce a day, every day

NDURONYL

'HYCLOTHIAZIDE 5 mg. with
ERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

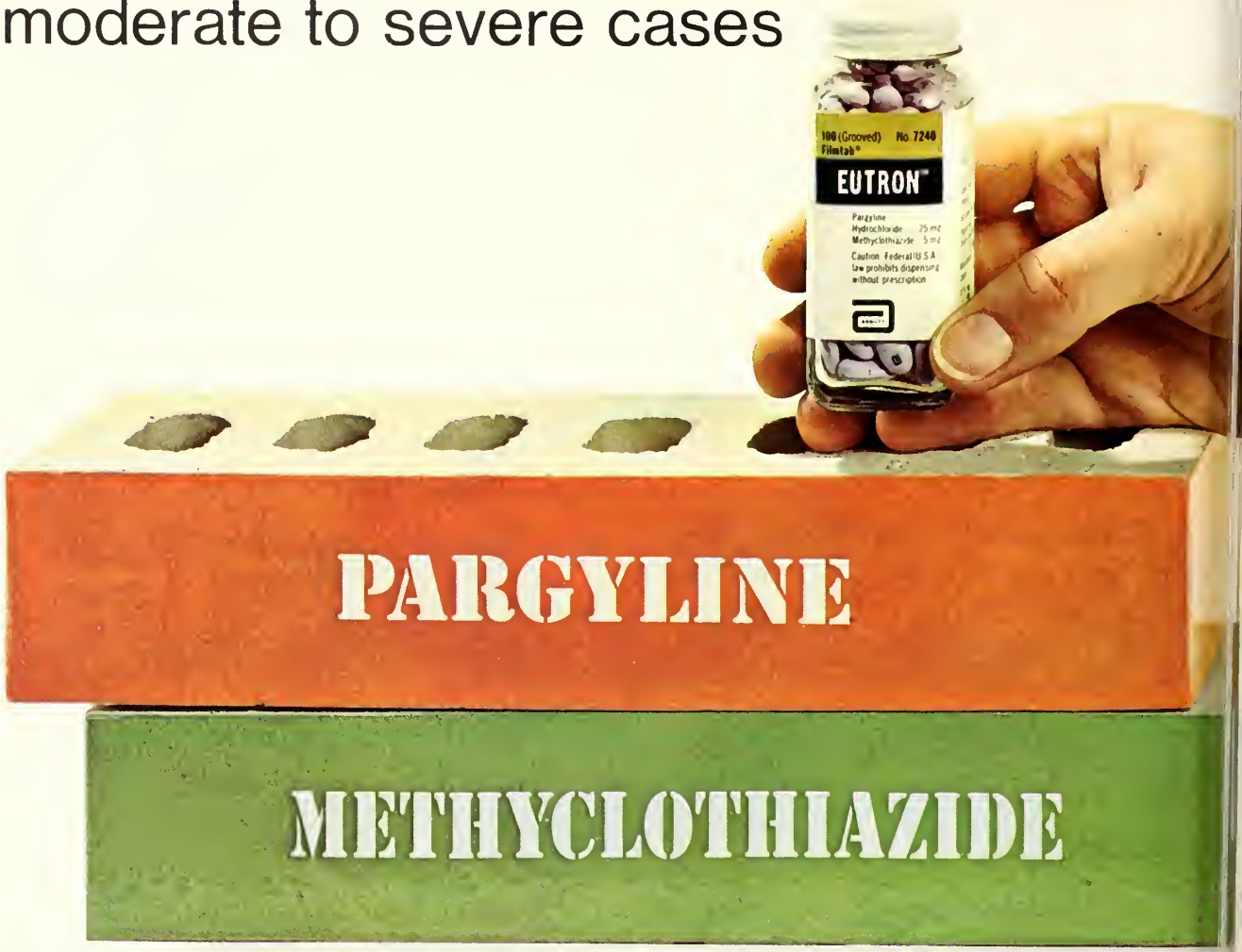
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether you patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings wer reduced from 112 pre-treatment to 90 post-treatment; *sitting* fror 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearl alike in all three body positions.

Use Eutron for managing your moderate to severe cases. It building blocks enhance each other; hence lesser doses often suffice

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVER



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804438R

ABBOTT

TM-TRADEMARK

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic need sof each patient may be realized.
Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

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Tablets & Elixir
For Iron Deficiency Anemia

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FAMOUS Fergon®
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To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



TUBERCULIN,TINE TEST
(Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

Lederle

330–8/6135

exercise & ARLIDIN® (NYLIDRIN HCl)↑↓





The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

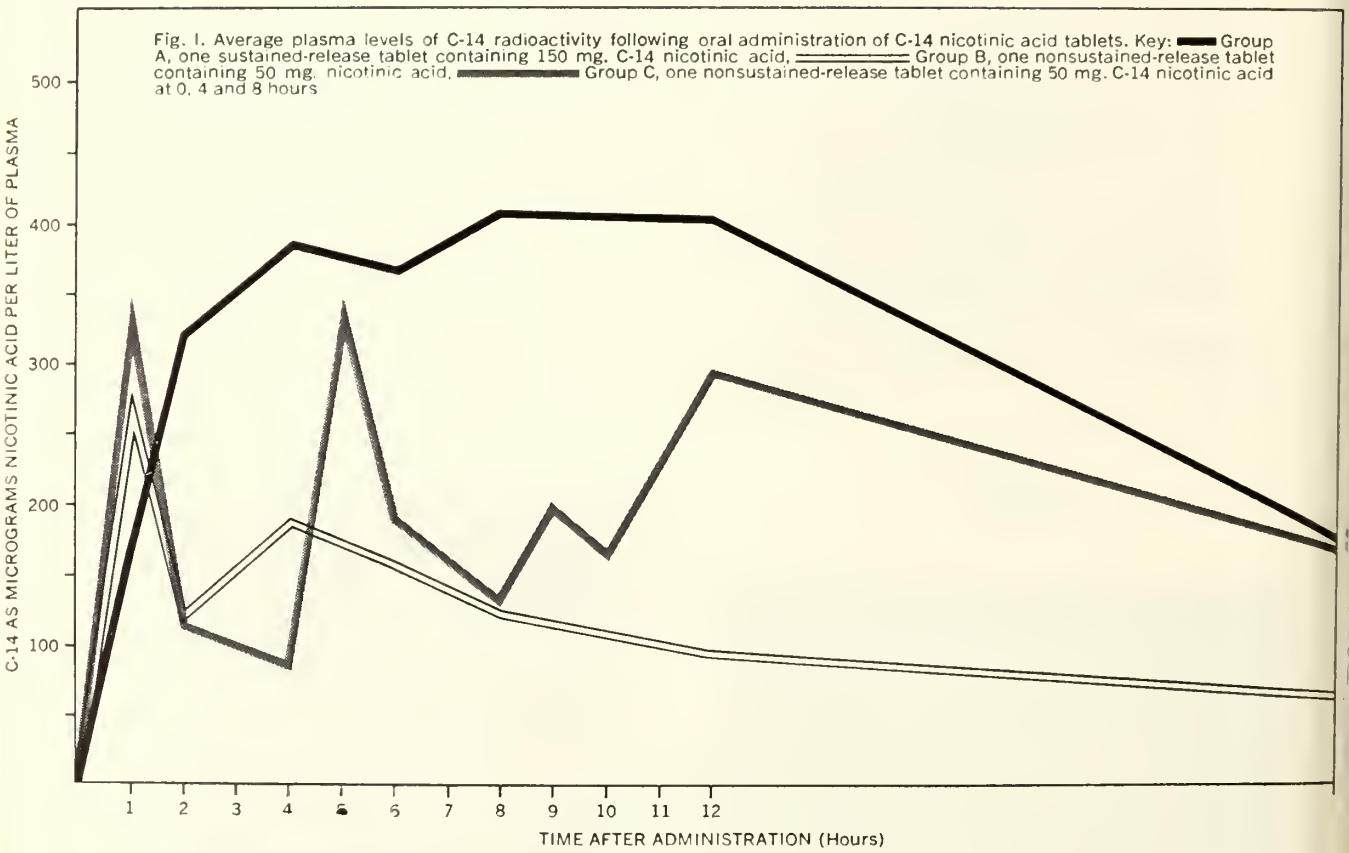
WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl.

Sustained circulatory, respirator and cerebral stimulation for th





(fewer absent doses by absent-minded patients)

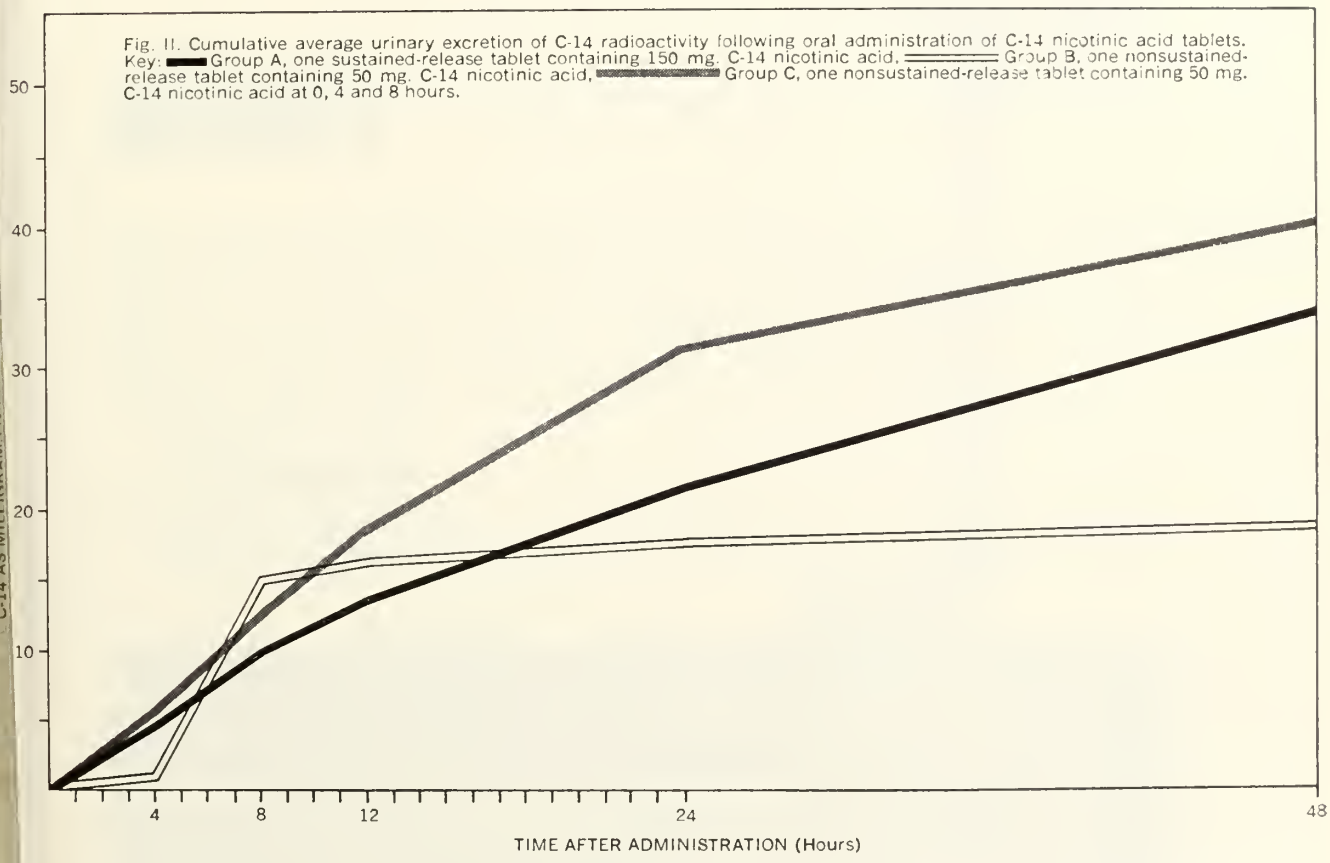
Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be con tinuous on a daily dose of only one Geroniazol TT tab let every 12 hours.

The gradual release of nicotinic acid in Geroniazo TT will provide the well-known peripheral vasodilata tion needed in patients with deficient circulation an with a minimum amount (if any) of "flushing." Alsc cerebrovascular circulation is complemented by pen tylenetetrazol, long-established as a cerebral and res piratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more aler

ged and debilitated



le confused and moody. Personal care, memory, er otional stability, social attention improve. Fatigue, ap thy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will pe mit your patients to enjoy the benefits of time-pr onged nicotinic acid/pentylenetetrazol therapy, at n economical price. Dosage is only one tablet every 12 hours.

Co traindications: There are no known contraindica-ti s.

Pr cautions: Exercise caution when treating patients wi a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and Pharmaceutical Industries Corp.



Vacation trip....

Motion sickness?



This time it'll be different. Emetrol taken before the trip begins will usually prevent nausea and vomiting. Emetrol is effective and safe...most helpful where safety is most important. It acts locally—not systemically.

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Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate solution
emesis control

From the First Family of Tetracycline—
One of the 31 useful dosage forms in the ACHRO Family
ACHROSTATIN® V Capsules
Tetracycline HCl 250 mg /Nystatin 250,000 units



The lowest priced tetracycline-nystatin combination

Lederle

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b.i.d.

If your objective in the use of a broad-spectrum antibiotic is prolonged action, with high blood levels, consider DECLOMYCIN 300 mg b.i.d.

The maintenance dosage of DECLOMYCIN 300 mg can be kept at this convenient schedule because of its unusually high effective blood and tissue levels.

In clinical practice, blood levels produced by a therapeutic dose of DECLOMYCIN are high, prolonged, and effective, because of high serum binding and slow renal clearance.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle

Prescribing information on next page.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
b.i.d.

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg every 6 hours for a minimum of 4 doses or 300 mg every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg every 6 hours or 300 mg every 12 hours until a cure is effected.

Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg in 3 divided doses for six days.

LEDERLE LABORATORIES, A Division of
American Cyanamid Company, Pearl River, N.Y.

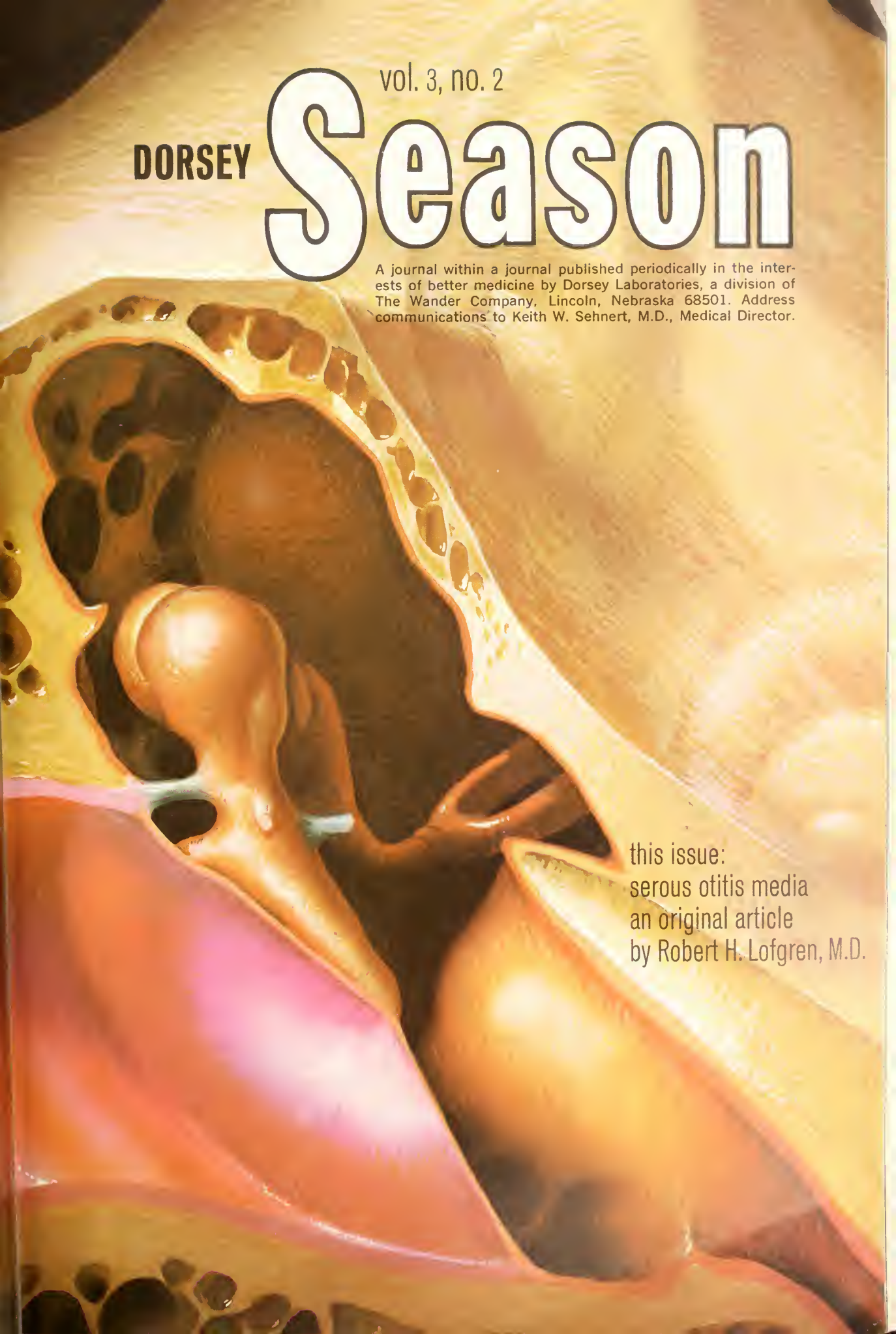
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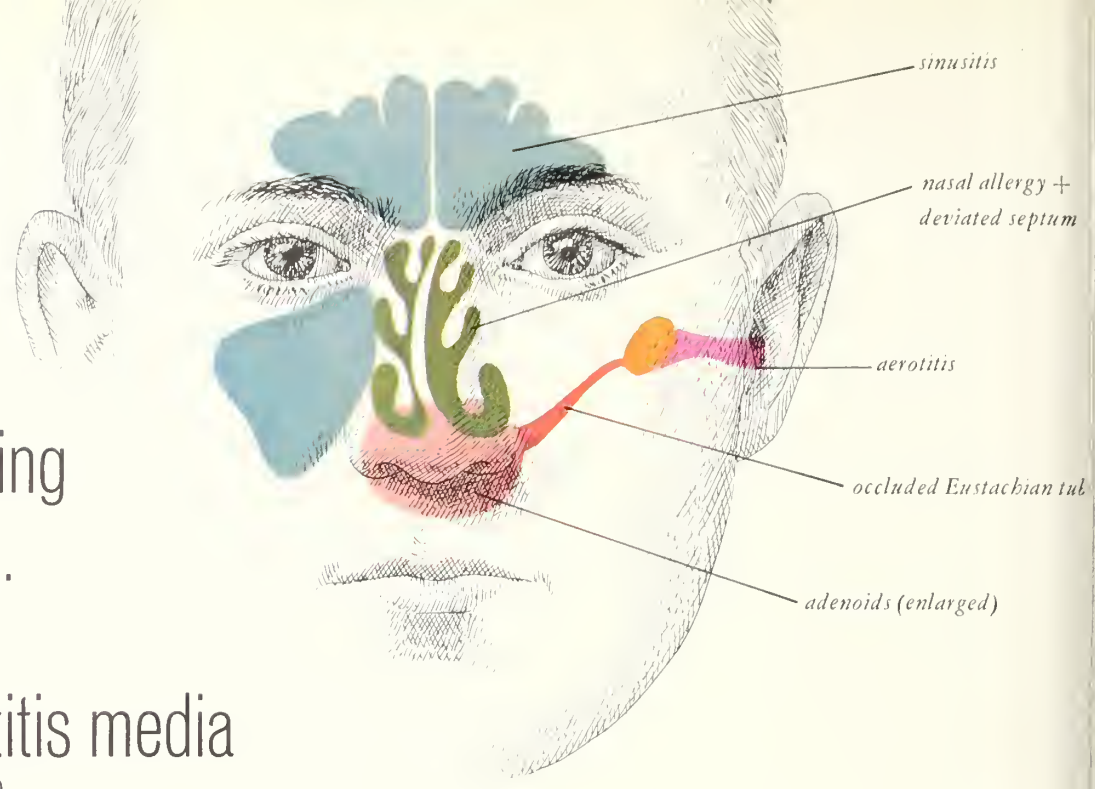
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DORSEY Season

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this issue:
serous otitis media
an original article
by Robert H. Lofgren, M.D.



the complaining earache... key to serous otitis media

Robert H. Lofgren, M.D.
Associate Surgeon, Massachusetts Eye and Ear Infirmary, Boston, Massachusetts

Serous otitis media is probably the most common ear problem in children, especially in the wintertime. Diagnosis is usually easy in adults, but may be quite difficult in children, especially the very young child where one has to depend almost entirely on the physical findings.

The symptoms of serous otitis are a fullness in the ear, a mild hearing loss and mild earache. The earache can best be described as a "complaining earache" instead of a "screaming earache" as found in purulent otitis media. A young child may be irritable and pull at the ear. In milder cases, and as the ear recovers, gurgling and popping noises can be heard in the ear.

On examination one may see a yellow tympanic membrane and if a fluid level is present the diagnosis becomes easy. However, the eardrum may be dull gray, or slightly pink, or even perfectly normal. Pneumomassage using a Siegle otoscope or a closed-head electric otoscope must be done on both ears, otherwise the diagnosis will be frequently missed. Attempted movement of the drum with the pneumatic otoscope produces either a sluggish motion of the drum or no motion at all instead of the easily movable normal drum. The Rinne test is negative and there is a 15-20 decibel conductive hearing loss. The bone conduction may be better than normal and an air-bone gap may exist even with the air conduction within normal limits. Occasionally one finds a false nerve deafness on the audiogram when thick glue-like fluid causes immobility of both the oval and round window. Both conditions return to normal when the fluid is removed, but they make the interpretation of screening audiograms very difficult.

There is no single cause for serous otitis. One factor always present is blockage of the eustachian tube, but this alone is not enough to produce fluid. There must also be an inflammatory reaction. Blockage of the eustachian tube may be caused by many conditions. In children the most common cause is enlarged adenoids. In the summer the next most common cause is allergy. Upper respiratory infections or influenza are common causes in the winter. Nasal allergy, acute and chronic sinusitis, nasal septal deformity and cleft palate can all cause eustachian tube obstruction. Some children may have a congenitally small eustachian tube, but fortunately they usually "grow out of the problem."

The first sign of a nasopharyngeal tumor is often a serous otitis. One must always rule this out in any adult who later in life develops repeated or persisting serous otitis. Causes sometimes overlooked are nasogastric tubes after surgery, simple obesity and cardiorenal disease, which may produce congestion in the mucosal lining of the eustachian tube. In recent years we have been seeing a new cause—acute otitis media, where the patient is adequately treated with antibiotics but where drainage has not been

established either through the eardrum or down the eustachian tube. A sterile exudate is left in the middle ear.

The inflammatory response may be caused by a marked negative pressure as in air otitis from flying, or it may be from a mild bacterial or viral infection in the middle ear. Serous fluid is a good culture medium and will frequently go on to purulent otitis media, especially if the original blockage was caused by an infectious process such as acute rhinitis or adenoiditis. When the infection heals there may be scarring in the middle ear mucosa. Mucous glands develop in this tissue and pour out a thick mucoid material. This ear usually looks normal until a pneumatic otoscope is used. The objectives in treating serous otitis are to remove the obstructing agent and to provide drainage from the middle ear. Often this can be accomplished by decongestants and nose drops. If large obstructing adenoids are present they should be removed. Sinusitis should be treated with oral decongestants or nose drops, plus antibiotics where indicated. Nasopharyngeal tumors should be treated. Allergies should be treated with antihistamines and, where indicated, by desensitization.

If the fluid does not clear with medical treatment within a week or two, a myringotomy should be done. If there is a question of active infection or if the fluid looks purulent, as is seen at the conclusion of acute otitis, cultures are taken. On adults this can be done in the office without anesthesia. It is no more painful than an intravenous needle for a blood test. A good safe topical anesthetic has a tremendous psychological value to the patient. Children under the age of 1 require no anesthesia. Between the ages of 1 and 3 anesthesia is not absolutely essential although a general anesthetic may be used to avoid the child's possible mistrust at follow-up examinations. I usually do the myringotomy at the same time as the adenoidectomy if the adenoids are enlarged. Once drainage has been established with decongestants or by myringotomy, positive pressure inflation of the middle ear is invaluable in forcing out the serous fluid and keeping it from reforming. The patient can do this himself by performing the Valsalva maneuver. This should be done several times a day, by taking a deep breath, holding the nose and blowing hard against the closed lips for a second or two.

In resistant cases where the fluid reforms as soon as the myringotomy heals, small polyethylene tubes are inserted through the myringotomy site. Insertion of the tubes, even in adults, usually requires an anesthetic. Good anesthesia can be obtained by infiltrating the canal wall with a local anesthetic, using a #27 needle. Once inserted the patient has no sensation of the tubes' presence. Be careful to caution the patient or parents not to allow any water to get into the ear canal while a myringotomy is open or a tube is in place. Water can be kept out by a pledget of lamb's wool in the ear canal or a cotton pledget thickly coated on the outside with petroleum jelly. I check these patients a week after a myringotomy to be sure it is healed and at two month intervals until the tubes have fallen out, usually within three to six months after insertion.

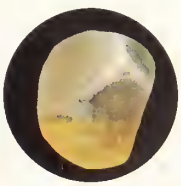
The mucoid type of fluid is so thick and tenacious that it is appropriately called a glue ear. It is aspirated only with difficulty through the eardrum, and occasionally must be removed through a tympanotomy. This thick, glue-like fluid is prone to recur, as the myringotomy usually heals long before the mucous membrane has returned to normal. Repeated myringotomies, as many as ten or twenty, were formerly required for this condition. Now polyethylene tubes are inserted initially when this thick, glue-like material is found. At times a subacute mastoiditis may accompany the serous otitis, which will necessitate a simple mastoidectomy before the condition can be eradicated. Usually the thin serous fluid readily responds to decongestants or to a myringotomy and removal of the eustachian tube obstruction. Occasionally, however, even serous fluid will repeatedly reform. For this, resection of the tympanic plexus of nerves which lies on the promontory of the middle ear has been carried out, as the tympanic branch of the glossopharyngeal nerve is the secretomotor nerve to the ear.

Failure to diagnose serous otitis is the most common cause of the recurrent, almost continuous otitis me-

Otoscopic Views



Normal



Acute Serous



Acute Purulent



Chronic Serous

dia seen in young children. In these cases a myringotomy will frequently provide a long-term cure without adenoidectomy or any other surgery. Failure to do this may allow the condition to go on to acute or subacute mastoiditis. Adhesive otitis media with scar tissue binding down the ossicles or tympanosclerosis may also result with permanent impairment of hearing. The prognosis for hearing with adhesive otitis or tympanosclerosis is usually poor. If the adhesions are removed, they reform, and the same is frequently true of tympanosclerosis even after a tympanoplasty. For many of these people a hearing aid is the only solution. The constant negative pressure in long standing serous otitis media may draw in either Schrapnell's membrane or the posterior superior portion of the eardrum forming a pocket to cause a chronic otitis media with cholesteatoma, which may not become apparent until twenty or thirty years later.

The non-medical complications of improper diagnosis or treatment may be even more serious. The irritable child, the frequent bouts of acute purulent otitis media with pain and fever, the expense of antibiotics and doctors, and the time lost from school or work affect the entire family.

In summary, serous otitis has many causes. There is a blocking of the eustachian tube and an inflammatory reaction in the middle ear mucosa, the latter usually caused by a mild infection. The treatment is to provide immediate drainage by decongestants and where necessary, by a myringotomy. The obstructing agent must be removed by surgery if it is adenoid or by oral decongestants, and antihistamines or nasal spray if it is an upper respiratory infection or allergy. Occasionally resistant cases require plastic tubes placed through the eardrum or other more radical surgery. Failure to treat properly leads to hearing loss which may be permanent, repeated acute otitis media or possibly even chronic otitis media with cholesteatoma.

References 1. Senturia, B. H. et al.; Middle Ear Effusions: Pathologic Changes of the Mucoperiosteum in the Experimental Animal, Ann. Otol. 71:632-648, 1962. 2. Grahne, B.; Serous Otitis Media, Acta Oto-Laryng. 58:1-8, 1964. 3. Sade, J.; Pathology and Pathogenesis of Serous Otitis Media, Arch. Otolaryng, 84:297-305, 1966. 4. Buckingham, R. A. and Ferrer, J. L.; Reversibility of Chronic Adhesive Otitis Media with Polyethylene Tubes, Laryngoscope 76:993-1014, 1966. 5. Chalat, N. I. and Lounsbury, E.; A Hearing Phenomenon and Serous Otitis, Laryngoscope 76:983-992, 1966. 6. Shucknecht, H. F.; Chronic Otitis Media in Children: A New Treatment, Clin. Pediat. 3:718-727, 1964. 7. Feuerstein, S. S.; Surgery in Serous Otitis Media, Laryngoscope 76:686-708, 1966. 8. Kapur, Y. P.; Serous Otitis Media in Children, Arch. Otolaryng. 79:38-48, 1964. 9. Silverstein, H., Miller, G. F., Jr. and Lindemman, R. C.; Eustachian Tube Dysfunction as a Cause for Chronic Secretory Otitis in Children, Laryngoscope 76:259-273, 1966.



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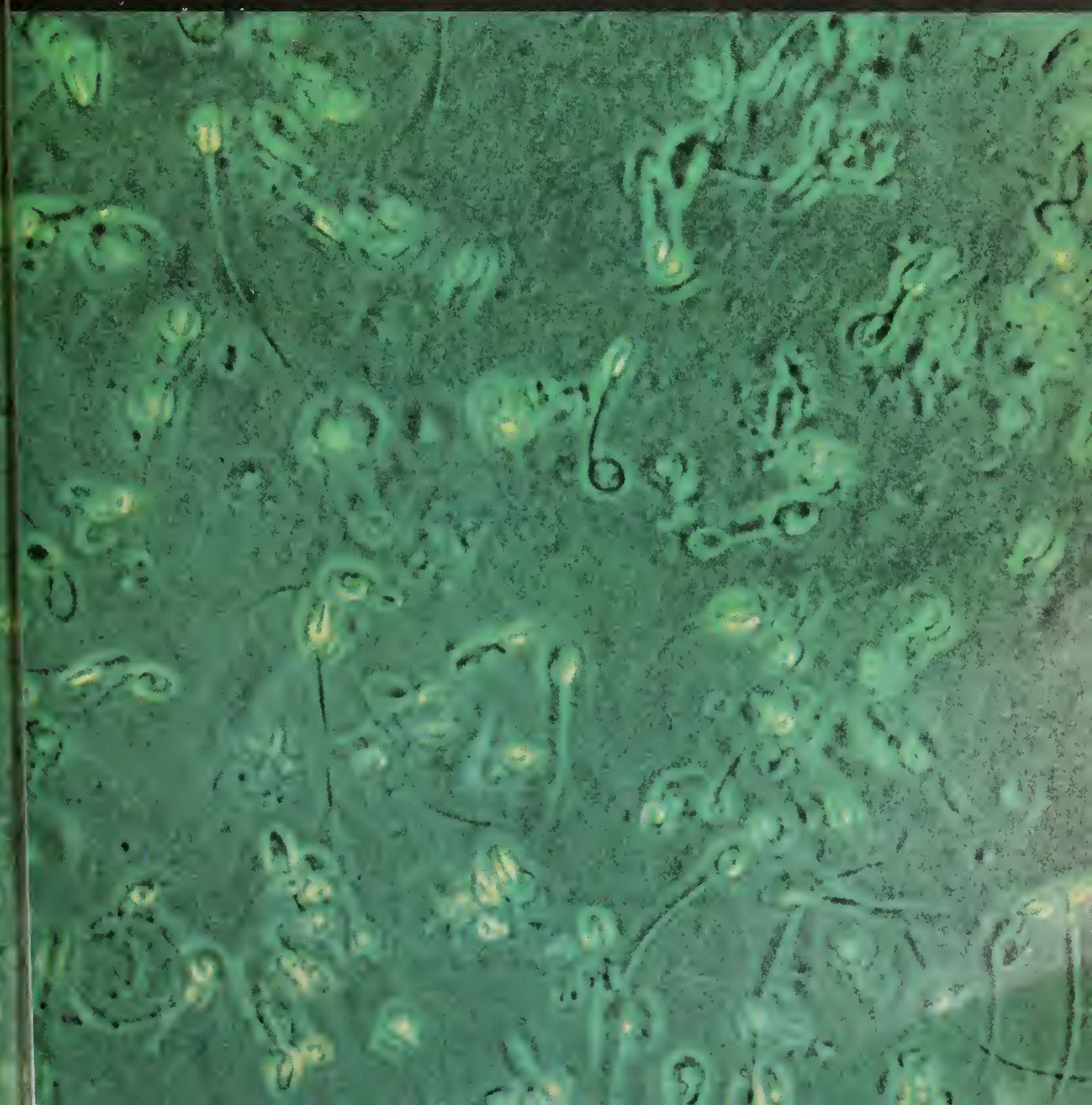
Each teaspoonful (5 ml.) contains: phenylpropanolamine hydrochloride 12.5 mg.; pheniramine maleate 6.25 mg.; pyrilamine maleate 6.25 mg. Side effects: Drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The possibility of drowsiness should be considered by patients engaged in mechanical operations requiring alertness. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis. Dosage: Children 1-6, ½ tsp.; Children 6-12, 1 tsp.; Adults, 2 tsp. Administer every 4 hours. Supplied: Bottles of 4 fl. oz., pints.

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When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. & mestranol 0.05mg)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretion, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, change in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, itching.

The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has been neither established nor disproved): thrombophlebitis, pulmonary embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metyrapone test, pregnanediol determination.

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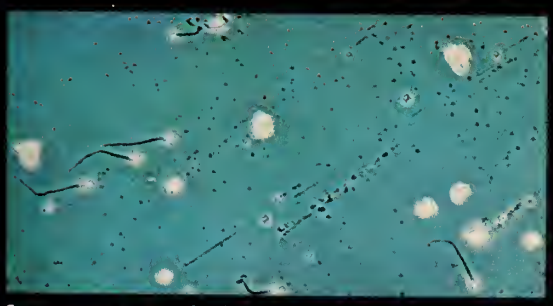
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

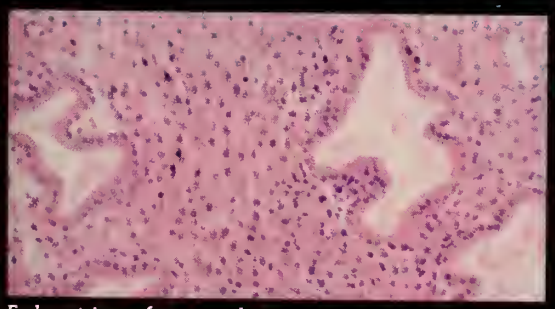
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.

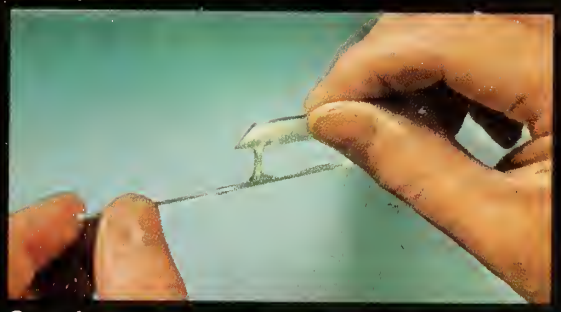


Spermatozoa appear healthy, active, freemoving.

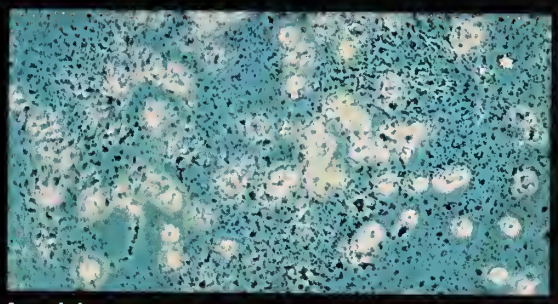


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

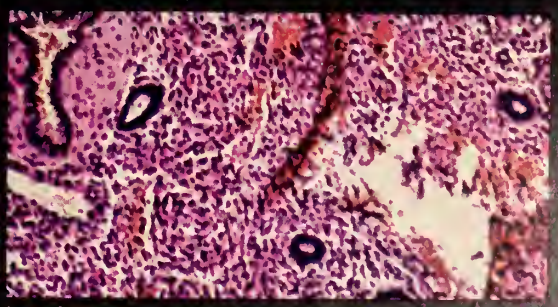
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

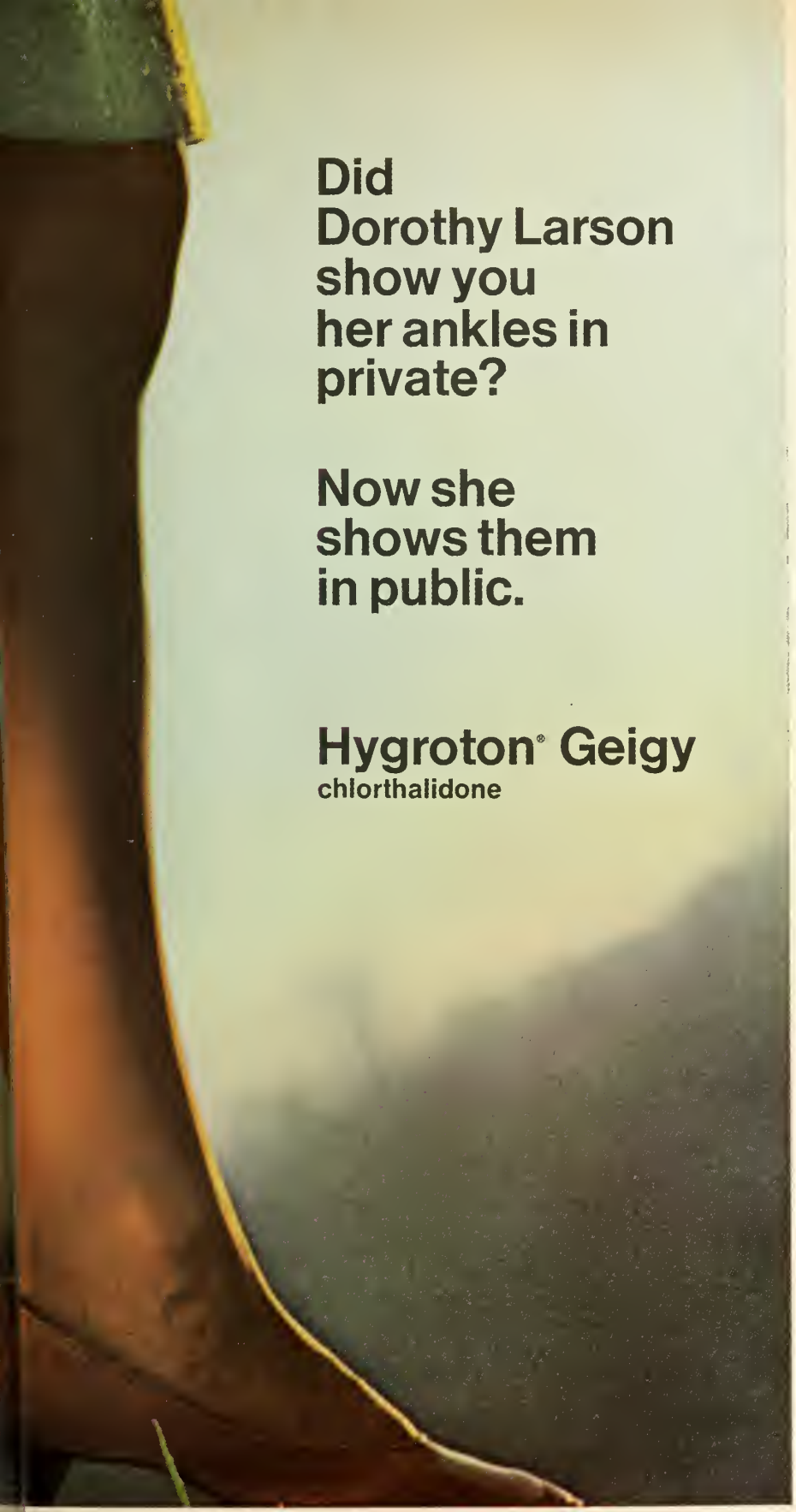
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Precautions: Antihypertensive therapy with Hygroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension. E
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or liver dysfunction is aggrav
Hepatic coma may be precipi
Electrolyte imbalance, sodiu
or potassium depletion may c
If potassium depletion should
cur during therapy, Hygroton
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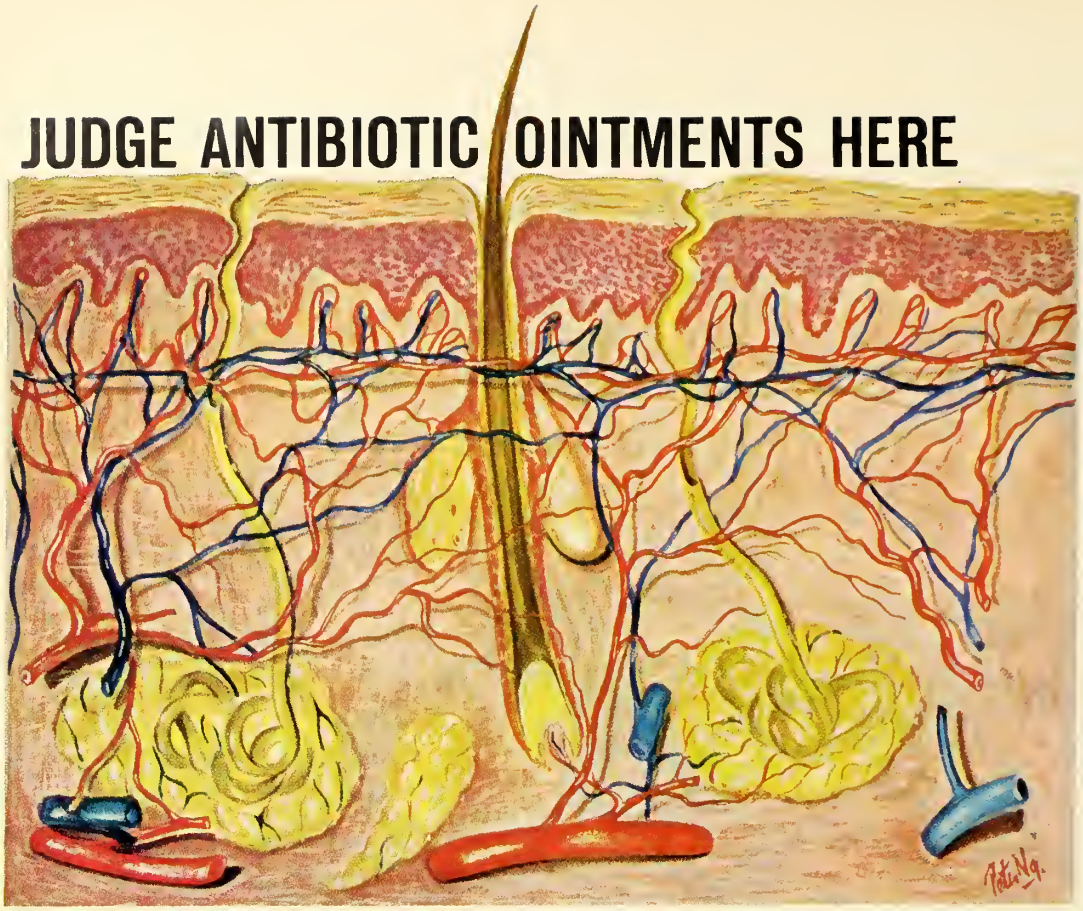
Hygroton therapy may mean troublesome side effects for some patients. And you can't prescribe it for patients with hypersensitivity to the drug or severe renal or hepatic diseases. Before writing it for your patients, please check the prescribing information. It's summarized below.

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scle amps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.
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Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of concomitant anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep drug-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, during lactation or in women of childbearing age requires that potential benefits be weighed against possible hazard.

Precautions: If combined with other psychotropics or antidepressants, carefully consider individual pharmacologic effects particularly with known compounds which may potentiate action of Valium, such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Employ usual precautions in the severely depressed or in those with latent depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

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Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, Tofrānil should not be used during the first trimester of pregnancy.
Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment with Tofrānil. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy.
Because of its anticholinergic effect, caution should be observed in prescribing Tofrānil for patients with increased intraocular pressure.
In rare instances, transient car
arrhythmias have occurred in
thyroid patients and in patient
ceiving thyroid medication wh
Tofrānil was added to the regi
Imipramine may block the pha
cologic activity of guanethidi
other related adrenergic neur
blocking agents.
The drug is not recommended
present time in patients under
of age.
Adverse Reactions: Dryness o
mouth, tachycardia, constipat
turbances of accommodation,
ing, dizziness, weight gain, ur
frequency or retention, nause
vomiting, peripheral neuritis,
parkinson-like syndrome, trer
rare cases of falling in elderly
tients, confusional states (wit
symptoms as hallucinations a
orientation), activation of psy
schizophrenics and agitation

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Toxic reactions severe enough to require discontinuation of Tofrānil are uncommon. However, for complete details, please refer to the full prescribing information.

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manic and manic episodes) y require dosage reduction ddition of a tranquilizer or y discontinuation of the drug, rm seizures, orthostatic on and substantial blood fall in hypertensive patients, ransient jaundice, bone marssion including agranulocysitization and skin rash photosensitization, eosinod mild withdrawal symptoms n discontinuation after proatment with high doses. al hormonal effects (imecreased libido, and estrocts) may be observed. ike effects may be more d (e.g. paralytic ileus) in e patients and in those cholinergic agents (includrkinsonism drugs).
Adult Dosage: Initially, ly, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
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PROGRESS IN PUBLIC PSYCHIATRY IN SOUTH CAROLINA

AN OVERVIEW

WILLIAM S. HALL, M.D.
State Commissioner of Mental Health

Psychiatry is moving into adolescence in South Carolina after a long childhood. The state mental hospitals have broken the mold of the old custodial era, but the majority of their patients still receive inadequate treatment. The private practice of psychiatry has come to the larger cities, albeit in token numbers. Public psychiatry has brought full time practitioners to clinics in at least three medium-sized communities which otherwise would be bereft of the specialty. Part time public clinicians spend much of their time in private practice in a number of other communities. Two psychiatric residency programs are accredited and graduating well trained specialists. A new psychiatric institute for training and research is off to a good start and soon will be turning out professionals in a number of allied disciplines as well as psychiatrists.

A good example of the growth and maturation of psychiatry in South Carolina is the South Carolina District Branch of the American Psychiatric Association. Established in 1957 with 24 members, the District Branch now has 48 members who turn out in good force for the quarterly meetings.

Considerable progress has been registered in public psychiatry, which is still in a rather dominant position. As noted above, the state mental hospitals have emerged from their high walls of isolation and have become treatment centers, at least in part. Twelve community mental health clinics are in full operation and a thirteenth has an office and a secretary and is working hard to recruit staff. Only one major area of the state lacks a clinic and an offical board is at work in Orangeburg County to remedy that situation. Most importantly, the nationwide movement to escalate clinics into comprehensive mental health centers is far advanced in our state. One comprehensive center is in operation and five others are in various stages of development. The eventual goal is 14 such centers serving all 46 counties. The psychiatric institute mentioned above has a current budget of nearly $1,000,000 and hopes to double its outlay during the next fiscal year.

Organizational progress has been rather outstanding. The old state hospital system, governed by a board of regents, gave way in 1952 to the South Carolina Mental Health Commission, a five-man board charged with ultimate responsibility of the state's public mental health programs. In 1964 the independent character of the commission's setup received confirmation and more precise delineation with the passage of a statute creating the South Carolina State Department of Mental Health with a clearly-defined executive officer called the state commissioner of mental health. Administrative functions affect-

ing more than one facility, such as finance, personnel, management and purchasing and warehousing, were put on a departmental level under a deputy to the state commissioner.

South Carolina was prodded into establishing the third state mental hospital in the United States in 1821 by two legislators from opposite ends of the commonwealth—Col. Samuel Farrow of Spartanburg and Major William Crafts of Charleston. They have been immortalized in the new name of the youngest of the two state hospitals, established early in the second decade of the 20th century.

The original hospital had a noble history. During part of the Reconstruction Era, Superintendent Joshua Ensor, M.D. (1870-1877) exhausted his own personal credit to keep his patients fed and warmed. Superintendent James W. Babcock, M.D. (1891-1914) pioneered in pellagra research. Superintendent C. Fred Williams, M.D. (1915-1945) was perhaps the foremost social psychiatrist of his day and was a pioneer in malarial-fever therapy for general paresis.

Following Dr. Williams' retirement from the superintendency, six years of relative instability in leadership, combined with the cumulative neglect of the physical facilities during World War II, brought the hospitals to a rather low ebb. Six legislators and three governor-appointed citizens undertook a searching investigation. They issued a report which Governor James Francis Byrnes, freshly returned from the national stage to offer his tremendous talents and experience to his home state, adopted as his own, calling the plight of her mental patients "South Carolina's Number One Problem". He took the entire General Assemby with him on a tour of the hospital, ordered one multi-story ward building demolished as a deadly danger, furnished emergency executive-department funds for fire safety sprinkler systems and persuaded the legislature to devote two entire year-end surpluses to mental health construction and renovations.

The $9,000,000 made available through those year-end state surpluses provided a good start toward enlarging the two big Columbia-based hospitals and rounding out their facilities, but continuing increases in resident patients filled up new ward buildings almost as fast as they were constructed so that overcrowding remained one of the chief hindrances to good patient care. As that special building fund was depleted, the legislature gave the hospitals the power to borrow construction money, amortizing the loans with the income from paying patients.

Public mental health operating budgets have increased nearly five-fold since 1952 to a current level of approximately $15,000,000 per year. However, the beginning point was extremely low and the increases have largely paralleled those in all other departments of state government, so that the needs are far from met. South Carolina still ranks near the bottom of all the states in its support of its mental health programs and many deficiencies persist in staffing patterns and support programs.

Elements of progress are notable, however. The work week has been reduced from 72 hours to 40. Salaries of professional employees have been made substantially competitive with those provided by nearby states. Other pay scales have been raised, although many job positions are still hard to keep filled because of low rates of pay.

Early in the current decade the upward curve of patient population leveled off and then began inching downward. During the past fiscal year the average daily patient population in the two state hospitals was 6,137, compared with the high point of 6,598 reached five years earlier. Overcrowding has been ameliorated somewhat, but is still present to a marked degree.

In 1963 the huge state hospital, already

divided into two units nearly seven miles apart, was separated into two distinct hospitals. The former State Park Unit became Palmetto State Hospital, while the original hospital near downtown Columbia retained the name South Carolina State Hospital. Later, Palmetto State Hospital was renamed Crafts-Farrow State Hospital.

Faced with the necessity of complying with the Civil Rights Act of 1964, the Department of Mental Health redefined the mission of the two state hospitals. South Carolina State Hospital was charged with the admission and initial treatment of all patients under the age of 65 and with continued treatment of patients with a fairly-hopeful outlook for early improvement. Crafts-Farrow State Hospital was designated as the admission and treatment center of all geriatric patients and others with a prognosis of long-term care and treatment. Massive transfers between the two hospitals were accomplished to speed the transition, at the insistence of federal authorities. Every vestige of racial discrimination has been erased.

Following the separation of the two hospital units into discrete hospitals, we concentrated on bringing South Carolina State Hospital up to the standards of the Joint Commission on Accreditation of Hospitals. One purpose was to safeguard our educational programs, notably the psychiatric residency training program, in view of the national trend to require accreditation of hospitals offering post-graduate training. Equally important was the goal of providing and maintaining the standards of patient care and treatment which are required by the regulations of the Joint Commission.

A herculean effort was required, including building several permanent enclosed fire escapes and upgrading our medical records. The result was worth the energy expended. In 1964 South Carolina State Hospital became the first state psychiatric hospital south of Maryland and east of Louisiana to be accredited by the Joint Commission. The first nod of JC approval was for one year, with further improvements suggested. The following year brought a full three-year accreditation, the maximum granted by the Commission.

Three other notable landmarks of progress have been made in recent years. Probably the most important is the activation of the Psychiatric Institute which we view as the keystone effort to provide the necessary manpower for the developing network of community services and the increasing needs of the hospitals as they become treatment centers in the true sense of the word instead of continuing to function as custodial institutions with a cream-like layer of active treatment. A second landmark is the prospective completion of a statewide network of community mental health clinics and the escalation of five or six of them into comprehensive mental health centers. A third outstanding achievement is the launching of a new institution for long-term skilled nursing care of patients whose psychiatric impairment is not serious enough to require mental hospital care but who would still be management problems beyond the capability of the average nursing home.

The development of the Psychiatric Institute and the community clinics and centers is described fully elsewhere in this issue of *The Journal*. The first unit of the long-term care facility is still on the architects' drawing board but the funds are in hand ($1,000,000 from a Hill-Burton construction grant and $500,000 from the Department's loan authority which is amortized by receipts from paying patients). The facility will be built on a beautiful 45-acre tract east of the campus of South Carolina State Hospital but divided from the campus by a major public throughway. This means that the facility will be near enough to be served, in large measure, by food service and other supporting components of the hospital, but

separate enough to develop its own identity. We are projecting that the facility will expand to 90 beds in the foreseeable future.

The long-term care facility will accept patients by referral from the state hospitals, the community mental health clinics and centers and from community nursing homes which are willing to enter into reciprocal agreements to accept referrals from the long-term care facility and from the state mental hospitals.

Another major development within the Department of Mental Health has been in the area of administrative, or support services. A full-fledged Division of Administrative Services has been activated under the direction of a deputy to the state commissioner of mental health. This division provides basic support services to all other components of the Department. These services include Management, Finance and Accounting, Personnel and Purchasing and Warehousing.

The Management Section is one of the more interesting developments of recent years. It operates as the cutting edge of our efforts to improve methods and effect economies. Management techniques which have proved useful to industry are being introduced into our programs. Electronic data-processing equipment is being used for such procedures as payroll, time and leave accounting, statistics and inventory control.

All of the foregoing, of course, is a form of socialized medicine. This has been the case since the beginnings of mental hospitals in America. It is difficult to see how it could have been otherwise in those early years—because of the chronic nature of mental illness and the paucity of therapeutic modalities until recent years. Private medicine simply was unable to cope with the problem.

The developments of recent years have opened up new vistas for the private practitioner in the field of emotional illness, both for the specialists in psychiatry and for generalists and many in other specialties. We are encouraging this trend in South Carolina. We welcome the collaboration of private physicians in the care and treatment of emotional illness. We plan to offer post-graduate short courses at the Psychiatric Institute to enable our bretheren in private practice to offer broader services to the emotionally disturbed and to do so more confidently. A number of private psychiatrists are working part time in our Psychiatric Institute. We hope to enlist considerable numbers of private physicians in the comprehensive mental health centers, both to work part time in the centers and to treat their own patients in the centers, in consultation with the psychiatrists there. We also are encouraging the training and recruitment of more private psychiatrists for South Carolina's communities. In fact, some of the men trained in our residency program have gone into private practice, with our encouragement and blessing.

Our master goal is to do all that the public sector of medicine can and should do to provide adequate psychiatric services to all South Carolinians needing them, as close to their homes as possible, with the least possible dislocation from their homes, jobs and social responsibilities. We invite the collaboration of the entire medical community to this end.

INTENSIVE THERAPY FOR NEWLY-ADMITTED PATIENTS

KARL V. DOSKOCIL, M.D.
Director of Professional Services
South Carolina State Hospital

The areas of South Carolina's two large mental hospitals where fairly adequate staffing patterns exist are the Admission-Exit and Medical-Surgical Services of South Carolina State Hospital.

The services get first priority on physicians and, to some extent, on nurses and other therapists because they minister to the most acutely-ill patients—mentally and physically. Also, Admission-Exit patients, as the term suggests, are coming and going in great numbers, requiring time-consuming initial workups and discharge planning.

In the Medical-Surgical Service patients receive quality care for acute physical illnesses and all kinds of surgical, laboratory and x-ray needs. The staff of seven full-time physicians is backed up by some 20 part-time consultants recruited from the Columbia medical community. The 206-bed James F. Byrnes Clinical Center, home of the service, is one of the finest general hospitals in South Carolina.

In addition to the therapeutic consideration, there is also a utilitarian and financial consideration behind the priority status of the Admission-Exit Service. If it were allowed to stagnate, the hospital soon would overflow with long-term patients. Overcrowding would become insufferable unless more buildings were constructed quickly, at a cost running into millions. More personnel would be needed for the new chronic wards.

Even more important is the fact that the neglect of the Admission-Exit and intensive care unit would relegate great numbers of people to a lifetime of marginal existence on the multiplying "back wards".

This is not to say that the staffing situation is ideal. Registered nurses are in short supply on these two services, as they are in almost every other hospital. The number of nursing assistants (formerly psychiatric aides) is far from optimal. Allied professionals, such as occupational and recreational therapists, are needed in far greater numbers. But conditions are good compared with those in other areas of the hospitals. Especially encouraging, at this writing, is the roster of full-time physicians. There are 15 physicians for the 450 to 500 Admission-Exit patients, a ratio of approximately one to 30, compared with a ratio of one physician to 300 to 350 patients in the long-term and geriatric wards. The Medical-Surgical Service has seven full-time physicians, in addition to some 20 consultants.

During the past fiscal year 3,824 patients were admitted to the Admission-Exit Service. More than 75 per cent of them go home directly from that unit without ever becoming a part of the old State Hospital. The average length of stay on the unit is 43 days. Many of the patients go home after four to five weeks. Some stay on the unit as long as six months.

The functions of the Admission-Exit Service are varied, but its primary missions are diagnostic evaluation, observation and intensive therapy. The primary therapeutic goal is restoration of the patient to a level of functioning that will enable him to return to normal community life.

"Diagnostic evaluation", as used here, means considerably more than the determination of a diagnostic slot, or name derived from standard classification nomen-

clature, under which an illness can be catalogued. Every effort is made to determine the current functioning level of a patient as compared with his level under normal conditions in his home environment before the onset of his mental illness symptoms, together with the change in his functioning in connection with the illness which precipitated his hospitalization.

Attempts are made to determine whether a patient should return home and try to function at his pre-illness level or whether certain reservations should be made and restrictions defined. Occasionally diagnostic evaluation may indicate that a patient is capable of functioning vocationally at a higher level than was customary before his illness. At that point, vocational rehabilitation specialists are called in and the patient is trained for a new work setting and is helped to find a job more suitable to his abilities or more to his liking. This form of therapeutic intervention and others often prevent the recurrence of emotional disability.

Assisting with diagnostic evaluations, under the overall direction of ward physicians, are social workers, psychologists, occupational therapists, recreators, music therapists, chaplains and others.

In order to cope more effectively with the great numbers of new admissions, especially in terms of developing contacts with significant sources of help in their home communities, the Admission-Exit Service is divided into two sections, one working with patients from the upper half of the state and the other working with those from the Lowcountry. The medical staff is organized into four teams, two of which are assigned to each geographical section. Each team has three to four physicians (the size of the medical staff fluctuates from time to time). Patients are assigned to these teams on a rotation basis unless there are therapeutic reasons for special assignments.

The home base and major "shop" of the Admission-Exit Service is the Williams Building, constructed in 1937 and originally equipped with extensive facilities for hydro-therapy and malarial therapy. Recently the building was renovated completely and refurnished. It has a new cafeteria where patients and staff dine together. In the ground floor is a modern admissions center and a medical records section, staffed on a 24-hour basis. The renovation task was accomplished largely by the engineering and maintenance forces of the Department of Mental Health at a cost of some $600,000 (the cost would have been in excess of $1,000,000 if the job had been put out on a contract basis). Just across the street is the Byrnes Clinical Center, connected to Williams by a covered walkway; thus x-ray, laboratory, ECG and EEG tests are accomplished without loss of time due to separation of the facilities.

Also assigned to the unit are other wards as needed and one large building with security features. The latter (the Cooper Building) houses court-committed patients, others who may be prone to leave without permission and, for want of a better solution, a special ward for young boys. Patients are transferred among the facilities as their changing needs indicate. As indicated above the majority of the newly-admitted patients are released directly from the unit, either on a conditional discharge (trial visit) or final discharge. Those who need extended hospitalization are transferred to one of the Remotivation Services (chronic wards).

Plans are being made to relocate and enlarge the children's unit to include young girls as well as boys. It will continue to function as an integral part of the Admission-Exit Service. We are projecting space and programs for some 30 children.

The Admission-Exit Service uses all types of psychiatric treatment including chemotherapy, electroconvulsive therapy, individual psychotherapy, group therapy,

occupational therapy, music therapy, recreation therapy and library therapy. The use of EST is comparatively rare. Chemotherapy is the most extensively-used approach. Insulin therapy and hydrotherapy have been discontinued, as is the case in most other American psychiatric hospitals.

As indicated heretofore, each physician on the Admission-Exit Service has an average of approximately 30 patients assigned to his care. This ratio, the best ever achieved in the history of South Carolina State Hospital, meets the recommended criteria of the American Psychiatric Association for an admissions and intensive-care unit.

Our experience indicates that a minimum of 30 days is needed to evaluate first-admission patients satisfactorily. During this period of time, rather definite conclusions can be made with the help of all of the allied disciplines. In addition to all of the disciplines associated especially with psychiatric care, we make use of consultative services in all of the medical specialties including neurology, complete laboratory services, electroencephalographic tests and x-ray.

Professional members of the treatment teams, in addition to psychiatrists and other physicians, include psychiatric social workers, clinical psychologists, nurses, vocational rehabilitation specialists, occupational therapists, music therapists and chaplains. We will describe briefly the work of some of these personnel.

Social workers provide the primary contacts between the hospital team and other persons in significant relationships to the patient—families, employers, and various others in the home communities. When a patient enters a psychiatric hospital, his physician needs to know as much as possible about him—his family background and relationships, his early life, education, work experience and social interests. Also needed is a description of the immediate symptoms observed in connection with his mental illness as seen by his family or others close to him. Such information, assembled by the social worker, is of the greatest importance to the psychiatrist, both in understanding the patient's immediate illness and in planning his treatment.

During hospitalization, the social worker serves as a continuing liaison person between the patient and his family. In collaboration with the patient's physician, the social worker interprets the nature of the illness to members of the family and enlists their cooperation in planning for the patient's future. When the patient is ready to return home, the social worker seeks to pave the way for a smooth transition from the hospital back to the home and the community.

The clinical psychologist provides significant aid during the diagnostic evaluation of patients. Complete psychological testing is accomplished when indicated, but most patients are accorded only the psychological evaluations which are indicated. Such testing is of considerable help in gauging the dynamics of the mental illness. The psychological data and the conclusions drawn may provide the basis for more effective treatment within a much shorter period of time than would be possible otherwise. In addition, the psychologist works closely with the psychiatrist in determining the patient's premorbid level of functioning. The psychologist also conducts individual or group therapy sessions and observes the patient's reactions in therapy in order to evaluate his current functioning level. All of these processes help the treatment team set realistic goals for the patient and set in motion a therapeutic regimen looking toward restoration to his former level of functioning or the best attainable level.

A very important aspect of treatment looks beyond the period of hospitalization to the patient's return to the family and the community. This involves the social worker and, when indicated, vocational

rehabilitation specialists. The goal is to help the patient find suitable resources of help after he leaves the hospital, as and if needed. Ideally, this help will come from the patient's own private physician and or from community mental health programs. More effective means of accomplishing such continuing therapeutic support are being sought.

When it is not possible or acceptable to the patient to refer him to such sources of help in his community, referrals often are made to the Aftercare Clinic operated by the hospital. He may return to this clinic on a weekly or monthly basis for some time. This supportive service and the others described heretofore often enable the patient to stay out of the hospital when otherwise he would be swept back in by the first wave of trouble or recurring symptomatology. Some patients in lower income brackets who need continuing chemotherapy are provided medicine in the Aftercare Clinic and some of the community mental health clinics free or at reduced prices.

Following the initial period of observation and study, patients who are found to be "not mentally ill" are discharged. In the case of first admissions, such discharges usually take place after 30 days. In the case of second or subsequent admissions, discharge may take place in less time—whenever the hospital staff feels that the patient no longer needs hospitalization or close supervision.

A patient who is diagnosed "mentally ill" is released as soon as the medical staff finds that his mental condition has improved to such an extent that he can function satisfactorily outside the hospital with minimal supervision, even though continuing treatment may be indicated on an outpatient basis (in the office of his private physician, in a community clinic or in the hospital's Aftercare Clinic). Such a patient is released from the hospital on conditional discharge (trial visit), and he may be returned to the hospital for further care and treatment anytime within a year without the formality of new admission papers.

During his hospitalization, a patient may be released on a pass for as long as seven days. Passes are issued with the consent of the patient's correspondent and are conditioned upon the willingness of some responsible person to supervise the patient's activities and see to it that he continues to take any prescribed medication.

When a patient is released from the hospital, a report is sent to his family physician, with the patient's permission, especially if follow-up care is needed. In some instances the hospital has no way of ascertaining whether the patient has a family physician or lacks his address. In rare cases, the patient does not wish to go back to the physician who signed his admission papers.

The public mental hospital should not replace any community resource which is able to provide adequate care to patients. Nor should the hospital relieve the community of responsibility by providing all of the care and treatment for the mentally disturbed who are indigent (or largely so). Actually, too often such is the role of the state hospital. Here is the "last resort" facility into which society presses many problem cases with which it is unwilling to grapple. This role, quite understandable in a former era when mental illness was little understood and less tolerated, should change at an accelerated pace now that some treatment breakthroughs are making possible community treatment for many conditions which formerly dictated immediate hospitalization. The welfare of the patient is paramount. No one should be sent to a central state hospital if his disabilities can be treated more efficaciously near his own home with only minimal disruption of his normal routine.

In summary, the Admission-Exit Serv-

ice of South Carolina State Hospital is part of a continuum of care. We provide a broad spectrum of care and treatment to patients, working with private physicians, community mental health clinics, families, employers and others. The goal is to restore patients to their optimal levels of functioning.

THE WILLIAM S. HALL PSYCHIATRIC INSTITUTE

JOHN L. HUGHES, M.D.
Director of Professional Services
William S. Hall Psychiatric Institute
Columbia, S. C.

The William S. Hall Psychiatric Institute is a new training and research facility of the South Carolina Department of Mental Health. Physically the Psychiatric Institute occupies a modern hospital-cottage complex which provides an unusual combination of beauty and function incorporating the latest concepts in mental health architecture and design. It is situated on one end of the S. C. State Hospital campus, which is located near the center of Columbia, and is adjacent to the new State Board of Health offices and laboratories and about one block away from the site selected for the new Columbia Hospital.

Historically, authorities in the mental health field and other areas of the state government recognized several years ago that a crisis confronted the state with respect to the procurement of badly-needed professional personnel in this field and the necessity of developing training and research programs to help alleviate this serious situation. In 1961, the South Carolina State Hospital was granted approval to develop a psychiatric residency training program. With one full-time staff member and assistance from members of the hospital service staff and professors at the Medical College of South Carolina, it began functioning at that time and accepted residents to all three years of training. Internships and practicum placements were also begun in several of the allied professional disciplines such as psychiatric social work and occupational and music therapies.

This marked an important beginning. However, it was everywhere evident that much more must be accomplished toward this end to meet adequately the rapidly expanding mental health needs of the state.

In addition to an awareness of the expanding horizon of mental health needs, as emphasized by the ever-increasing momentum of the community mental health movement during the past few years, there also was an acute awareness of deficiencies and obstacles inherent in the existing training programs. In spite of every possible effort, the psychiatric residency training program, the very cornerstone of the entire training effort, was placed on a serious probation by the Council on Medical Education of the American Medical Association early in 1965. The Council cited five major areas of deficiency which primarily related to lack of qualified teaching staff in those areas or inappropriate clinical case load connected with the admission or service policies prevalent in the State Hospital setting.

The deficiencies which resulted in the probationary status for the residency training program were well known to the teaching staff and to the administration of the Department of Mental Health. The difficulty was not one of recognition but rather of correction. Some months prior

to the survey, the entire training situation had been thoroughly assessed and compared with a number of other programs in this region. Following this survey, serious discussion was in progress regarding the best ways to cope with the existing situation as well as to look ahead to future needs. The unfavorable outcome of the examination of the training program simply gave impetus to the process of necessary change already in progress.

Convinced that only a bold new approach would succeed in developing the quality and scope of training needed, the decision was made to withdraw gradually from an exclusively State Hospital setting to a facility devoted specifically to training and to research. The Department of Mental Health decided early in 1965 to seek approval of a major reorganization of facilities, thereby making possible greatly expanded goals in the areas of training and research.

The Department was fortunate to have a recently-activated modern complex as a major component of the admission and intensive treatment unit of the South Carolina State Hospital, designated The William S. Hall Psychiatric Institute. This facility had already been designed to accommodate educational and training needs and thus could be used as the major focus of the training programs in the State Hospital. In May, 1965, the State Legislature approved the request to designate the William S. Hall Psychiatric Institute an autonomous institution within the Department of Mental Health. The component thus became organizationally separate from the South Carolina State Hospital, although its clinical facilities were to continue to be used by the Hospital until it was gradually acquired by an Institute staff to be recruited.

The move toward the Psychiatric Institute setting parallels the situation to be found in a number of other places. A notable example is the new Georgia Mental Health Institute in Atlanta. The rationale for creating this type of setting has to do, of course, with the goal of developing an academically-oriented faculty and teaching hospital whose primary mission is training and research. The Institute would have an identity suited to its own needs and the autonomy to develop its own programs to meet those needs. From a practical point of view, the chances of recruiting a well-qualified faculty for this type of facility appeared much greater than for any program organizationally located within a service-oriented state hospital setting. It was further felt that this type of structure would provide innumerable other benefits ranging from practical operational procedures such as regulation of admissions to enhancement of affiliations with other institutions and public support and utilization.

Following legislative approval of autonomous status for the William S. Hall Psychiatric Institute, organizational planning already under way began to firm up and expand. Major emphasis was immediately placed upon recruitment of a qualified full-time teaching faculty.

Recruitment efforts met with some initial success, and the 1965-1966 academic year began with a general psychiatrist, a child psychiatrist and a neurologist functioning in full-time teaching capacities and another general psychiatrist working half time on the teaching staff. All efforts were bent toward attempting to save the psychiatric residency training program which had been placed on a one-year probation and was scheduled to be completely disqualified the following June unless a re-examination could be scheduled and passed in the interim. This was a severe challenge and formidable undertaking indeed which confronted the small faculty of the embryonic Institute.

In retrospect it can now be said that the faculty met the challenge. Efforts were made on all fronts. The entire curriculum of the training program was revamped and the clinical requirements of

the residents were geared entirely to their training needs. Closer relationships were established with private psychiatrists and other professional people in the community who could serve as teaching consultants. This augmented the full-time teaching staff tremendously. Much effort was spent in strengthening affiliations with the Medical College of South Carolina and the University of South Carolina as well as with local general hospitals and the State Board of Health.

Proof of the success of these efforts came the following spring when the training program was re-examined and returned to fully-approved status without any qualifications. This meant that the residency training program was not only on the soundest ground ever but was also again in an effective position to recruit new residents, since the probationary cloud was no longer ominously overhead.

The 1966-1967 academic year was marked by significant advances for the Psychiatric Institute. A chief of Administrative Services was added and the organizational structure rapidly began to shape up. The teaching staff was enlarged with the addition of two general psychiatrists and two social workers early in the year and another general psychiatrist, a second child psychiatrist and a clinical psychologist before the fiscal year closed. Two new first-year residents were recruited and a second-year resident joined the staff while the training program continued to expand and improve.

Clinical operations got underway during the second year of the Institute. The Child Psychiatry Clinic accepted its first case for diagnostic evaluation during the early spring of 1966. Shortly thereafter the Neurology Service began to give consultations in the state hospitals and to see a limited number of neurology outpatients. The Adult Psychiatry Outpatient Clinic was organized and began accepting patients in August, 1966. This permitted the focus for outpatient experience in the training program to be shifted from the Columbia area Mental Health Center, where it had previously functioned, to the Institute's own outpatient department. The Inpatient Service of the Institute was organized in September, 1967, and a female ward was opened. The first patient, a middle-aged woman from Greenville County, was admitted on September 24, 1967. The opening of a male inpatient ward followed closely in November, 1967. These wards provided the primary training setting for the two first-year psychiatric residents. The year for the Institute brought advances in organizational structure, staff additions, and the initiation and development of clinical activity.

Dr. Alexander G. Donald was appointed Director of the Institute in April, 1967. Dr. Donald, a certified psychiatrist, was already serving as Deputy Commissioner of Community Services in the Department of Mental Health and continued in that position temporarily as he assumed the role of Director of the Psychiatric Institute on a part-time basis. It is anticipated that he will assume full-time direction of the Institute in the near future.

Currently the development of the Psychiatric Institute appears to be progressing well in all areas. It enjoys relative administrative and budgetary autonomy as an independent institution within the Department of Mental Health and recently acquired recognized hospital status by gaining approval and membership in the South Carolina Hospital Association and the American Hospital Association. The medical staff has been organized under bylaws, rules and regulations as recommended by the Joint Commission on Accreditation of Hospitals. Full implementation of medical staff committees, as required by the Joint Commission, has already been accomplished and a survey by the Joint Commission on Accreditation has been requested at their earliest convenience.

The size of the faculty has continued

to increase. At this time there are six general psychiatrists, a child psychiatrist and two neurologists on the medical staff and two clinical psychologists, four social workers, a music therapist and chaplain in the allied professional disciplines.

Clinical operations have also enlarged. The Inpatient Service now has three wards in operation and is under the direct supervision of two attending psychiatrists. There the four first-year residents develop a firm foundation in basic psychiatry and become increasingly familiar with diagnostic and treatment procedures with inpatients. The Inpatient Service maintains a dynamic milieu setting designed to render top-quality diagnosis and treatment for the patients while giving the resident physician a broad experience, using an interdisciplinary approach under the close supervision of qualified clinicians and teachers. The admission of patients is predicated upon teaching needs and referrals are derived from a variety of sources, including mental health clinics, social agencies, and private physicians. Emphasis is on intensive short-term treatment with the average length of stay currently being about six weeks.

Outpatient clinic areas of the Institute have progressively expanded operations during recent months. The Adult Psychiatric Outpatient Clinic, the Child Psychiatry Clinic, and the Neurology Clinic all currently receive referrals for diagnosis and treatment. Patients are seen as rapidly as the size of the staff permits with all possible consideration given to acute situations.

A neurology teaching ward was activated in January, 1968, to augment the consultation service and outpatient clinic already operated by the Neurology Service.

The Psychiatric Institute officially has two approved training programs operational at the present time. The program in clinical pastoral training and counselling gained approval several months ago and now has four trainees in the one-year course. The Department of Psychology of the University of South Carolina recently assigned a graduate student in clinical psychology to the Institute for his clinical internship.

The psychiatric residency training program, while completely operated by the faculty of the Institute, is still officially located in the South Carolina State Hospital. The program will be transferred to the Institute as soon as this can be effected following approval by the Joint Commission on Accreditation of Hospitals. The same situation exists for several other training programs such as occupational therapy internships and placements for social work students.

The psychiatric residency program currently has seven physicians in training. Training is under the immediate direction of a Chief of Residency Training, who is the chairman of the Residency Training Committee where policy affecting the training program is formulated. All members of the Institute staff have direct teaching responsibilities in the training programs and other educational activities of the Institute.

The residency program is eclectic in its orientation and utilizes an interdisciplinary approach which embraces all of the allied professional disciplines. The position of the Institute and its programs is somewhere between the more circumscribed training of the medical center and the more loosely organized and less comprehensive programs in a typical state hospital. It is felt that the program, being within the Department of Mental Health, is in an especially advantageous relationship to community psychiatry. Strong emphasis on family and group interactions appears a natural and desirable consequence.

The residency training program has benefited immeasurably from the participation of outside teaching consultants. Much attention has been given to develop-

ing strong affiliations with other institutions and relationships with individual professional people. The Institute enjoys sound affiliations with the Medical College of South Carolina and the University of South Carolina. Teaching consultants from the Medical College, particularly in the areas of neurology, the basic sciences and child psychiatry, have been indispensable to the training program over the years. The University has supplied consultants in psychology, sociology, anthropology, law and other areas. Individuals have also contributed greatly to the teaching efforts; especially is this true of physicians in the private practice of psychiatry and on the staff of various mental health clinics in the state.

The teaching faculty is making every effort to maintain the highest academic training policies and methods and to incorporate the latest teaching devices and techniques. Much consideration and concern is devoted to the Professional Library, which is seen as of prime importance in this regard. A library expansion program is actively underway and has already resulted in significant additions to the holdings in books and journals and will soon double its present physical size. Important also is the recent acquisition of a closed circuit television unit which will permit this important modality to be utilized in training in a number of areas. The services of a photographer have been secured, opening the way for the beginning of a medical illustration section.

Research in the biologic and psychological areas, both basic and applied, is actively fostered. The availability of large and varied patient populations provides tremendous research potentialities. It is anticipated that as an acceptable base line of activity is attained, increasing grant support for specific research projects will become available. Prospects of collaborating in joint research efforts with other institutions such as the State Board of Health Laboratories, the University and the Medical College all appear excellent; and, in fact, some joint effort is already in progress.

Immediate goals for the Psychiatric Institute include attainment of full accreditation of its hospital status, official transfer of the psychiatric residency and other training programs to the Institute, and successful recruitment of additional staff and of trainees for the various training programs. Future projections include continued expansion of existing clinical areas and the activation of other areas which might include geriatric psychiatry, psychosomatic medicine, inpatient child and adolescent units, a partial care unit, and a seizure clinic. Plans are already in the formative stages for developing an active program in continuing education. Such a program will provide both intramural and extramural teaching to a variety of groups such as non-psychiatric physicians, schools, law enforcement agencies and many others. Another exciting prospect is for the establishment of a child psychiatric fellowship within the next year or two to help relieve the tremendous shortage of child psychiatrists in the state.

The William S. Hall Psychiatric Institute is a young institution experiencing many growing pains but also possessing a youthful vigor and determination to succeed. The hope of meeting the mental health needs of the state appears to rest partially at least upon successful training programs within the state. The Department of Mental Health recognizes its responsibility to meet mental health needs and, in concert with the Medical College of South Carolina, is fully committed to the development of training and research programs of excellent quality which can make significant contributions toward achieving our health goals.

ADMISSION PROCEDURES AND PROBLEMS AT STATE MENTAL HOSPITALS

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Since all licensed physicians are either actually or potentially part of the admissions process for the state's mental hospitals, a brief orientation is felt to be in order, together with a description of some problem areas.

Three institutions are involved: South Carolina State Hospital, located on Bull Street near downtown Columbia; Crafts-Farrow State Hospital, located approximately five miles from Columbia at the intersection of State Highway 555 (Farrow Road) and Interstate 20, and the William S. Hall Psychiatric Institute, located on the north side of the grounds of South Carolina State Hospital.

There are four general types of admission to these hospitals:

1. *Medical admission.* This type of admission is based on the application of a friend, relative, spouse or guardian. The application must be endorsed by two physicians who certify that each of them has examined the patient and finds him to be mentally ill and (a) in need of hospital care but, because of his condition, lacks sufficient insight into his condition or capacity to make responsible application therefor or (b) because of his condition is likely to injure himself or others.

2. *Voluntary admission.* This type of admission is based upon the prospective patient's own responsible application or, in the case of minors, the application of his parent or guardian. Applicants for voluntary admission are screened by a designated hospital physician, during regular office hours. The hospital physician must be convinced that the prospective patient is capable of making a responsible application and is mentally ill and in need of hospital care and treatment. Applicants who are screened and referred to the hospital by psychiatrist-directors of the community mental health clinics and centers are accepted routinely. Applicants must be 21 years of age or 18 years of age and married.

3. *Emergency admission.* This is a simplified form of admission designed to handle emergency situations quickly. An applicant can be any person who believes a prospective patient is likely to injure himself or others. At least one physician must endorse the application, certifying that he has examined the prospective patient and believes he should be hospitalized immediately. If at all possible, a telephone call should be placed to the hospital's Administrative Officer of the Day before an emergency admission is brought in.

4. *Judicial admission.* This form of admission is based on the application of a friend, relative, spouse or guardian. The application must be accompanied by a physician's written statement that he has examined the individual and believes he should be hospitalized or that the individual has refused to submit to a medical examination. Upon receipt of the application, the court appoints two physicians to examine the proposed patient. If both medical examiners agree that hospitalization is indicated, the judge sets a hearing and makes a ruling on the basis of the physicians' findings and the testimony during the proceedings. The judge's decision is subject to appeal to a court of common pleas in which case a trial by jury is held.

There is another type of admission

which is limited currently to the William S. Hall Psychiatric Institute. It is *informal admission*, a procedure very similar to checking into a general hospital. An Institute physician must agree that the individual is a proper subject for care and treatment in that institution. In addition, a need must exist for the particular type of case presented for teaching purposes, since the Institute is a teaching and research facility. Patients admitted informally are free to leave at any time during normal working hours and the Institute has no authority to hold them temporarily for judicial determination of their need for extended care.

Still another form of admission is by direct court order. No medical examination is required, but judges often consult with physicians before signing such orders. Most of the individuals involved are under criminal indictment and the courts ask for psychiatric examinations on the questions of legal sanity and competence to stand trial.

There are a number of legal technicalities and provisions in connection with the four basic forms of admission.

Medical admissions (type No. 1 above) must enter the hospital within 15 days following the medical examinations, exclusive of any period of temporary detention provided for in a special law. After that period of time elapses, new application papers must be completed and fresh medical examinations accomplished.

Emergency admissions must enter the hospital within three days after the date of the medical examination; otherwise, new admission papers must be completed and a fresh medical examination accomplished.

Patients admitted by the first three methods enumerated (medical, emergency and voluntary) are subject to being held for involuntary treatment if hospital physicians so recommend and if the courts ratify their judgment. In any case, such patients may be retained for 30 days of observation and diagnostic evaluation. After 30 days a patient may apply for release, whereupon the hospital has seven days to file an opinion with the proper probate court stating that his discharge would be unsafe for himself or others. Within the next 15 days the court must commence the proceedings for judicial admission described above (type No. 4). A patient confined by judicial order is entitled to a re-examination after the first six months and annually thereafter.

Patients are admitted to the two state hospitals according to their ages. Those under the age of 65 are admitted to South Carolina State Hospital and those aged 65 or over are admitted to Crafts-Farrow State Hospital.

Admissions to the William S. Hall Psychiatric Institute are selected by the staff on the basis of the Institute's need for a broad spectrum, but balanced complement of teaching cases.

The areas in which problems most frequently arise in connection with admission applications are uncomplicated alcoholism, harmless senility and mental retardation.

Existing laws forbid the admission of garden-variety alcoholics or drug addicts into the mental hospitals. Addicts of either sort can be admitted if there is a psychosis superimposed on the addiction (such as delirium tremens or a chronic brain syndrome). We know that some physicians stretch their consciences and describe alcoholics as mentally ill in order to relieve critical family situations. This situation may be altered radically soon by the provision of a special center for involuntary treatment of alcohol and drug addicts.

Hardly a week passes that we do not receive three to five unacceptable applications for admission of elderly persons with arteriosclerosis or other senile conditions. We cannot accept these people unless they are an actual danger to themselves or others or unless they present

behavioral problems beyond the management capacities of a community nursing home. If we did not hold the line at this point, our already-overcrowded geriatric wards would overflow or else we would have to spend many millions of dollars for new buildings and additional personnel.

The mental retardation institutions are overcrowded and have always had long waiting lists, so that often it requires months or even years to gain admission to them. We have received many applications for admission of mentally retarded individuals to the mental hospitals, especially adults with behavioural problems. Here, again, we can act favorably on applications if there is a clear psychosis superimposed on the basic condition.

Another problem encountered rather frequently is an incomplete application or a description of symptomatology that fails to meet the legal criteria for admission. Sometimes such applications could be approved if they had been formulated carefully and accurately.

Another lesser problem concerns the proverbial illegibility of signatures on the part of some physicians. It would be very helpful if physicians would have their secretaries type their names below their signatures.

One final suggestion: Please write the hospital or telephone the admitting officer about applications before sending a prospective patient. If this practice were universal, some very embarrassing and inconvenient incidents could be avoided.

Admissions are still on the increase. We are hopeful that this trend can be reversed somewhat when we complete our network of comprehensive community mental health centers and when more general hospitals offer intensive, short-term psychiatric treatment. Meanwhile, the flood continues. An average day brings 10 or more admisions, sometimes as many as 30. If physicians encounter difficulties in the process, so do we. Let us be patient and communicate with each other when these situations arise.

Mr. McMahan died April 27, 1968 in Cayce, S. C. He was 48.

Management of the postphlebitic leg. William H. Prioleau (Charleston) Med Times 95. 549-555, (May, 1967)

The postphlebitic leg has suffered permanent damage to the walls and valves of the veins. The resulting venostasis causes edema, dermatitis and ulcer. Support of the venous return by a modification of Unna's boot causes a reversion of the tissue changes. When full benefit has been obtained, operation should be performed to protect the superficial veins from the increased pressure of the deep veins, which is transmitted through communicating veins with incompetent valves. In most patients the leg will require some form of support indefinitely in order to control dependent edema. Patients should be observed as to the adequacy of the support being used and the possible development of new incompetent perforating veins. Illustrations of application of supportive boot. Reprint address: 158 Rutledge Avenue, Charleston, S. C. 29403

W. H. Prioleau

THE LONG-TERM OR "REMOTIVATION" WARDS AT THE STATE MENTAL HOSPITALS

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South Carolina's two state mental hospitals have a large number of long-term or continued care patients who are assigned to "Remotivation Services". This concept of "remotivation" is somewhat euphemistic in view of the limited treatment resources available on most of these wards. However, it does connote the aim and effort of the hospitals to remotivate and rehabilitate as many as possible of these unfortunate people, many of whom have spent the greater part of their lives on the "back wards", as they are called sometimes.

At South Carolina State Hospital, approximately 2,600 patients are on "remotivation" wards at any given time. The number at Crafts-Farrow State Hospital is approximately 1,400, although it would be much higher if the category included those patients over the age of 65 with similar prognoses. As it is, the older patients are described as "geriatric" patients and there are some 1,350 of them at this writing. Among the remotivation patients are approximately 750 mentally retarded individuals, many of whom should be in an institution for the retarded but are retained in the mental hospitals because of the acute shortage of beds and the long waiting lists at the state's mental retardation facilities.

There is a broad distinction between the remotivation services at the two state hospitals. By and large, those at South Carolina State Hospitals are adjudged to be more responsive to treatment and those at Crafts-Farrow Hospital are deemed less likely to be able to leave the hospital within a year or two. To this end, two years ago when the two hospitals were desegregated and assigned new and distinctive treatment roles, there was a massive exchange of patients. All the geriatric patients were transferred to Crafts-Farrow Hospital and hundreds of patients with some outlook for short-range or medium-range release were transferred to South Carolina State Hospital. The desegregation process was accomplished with something more than deliberate speed because of the insistence of federal officials that racial integration be speeded. Unfortunately, limitations of staff are such that classification of patients at both institutions still leaves much to be desired, but an effort has been made to group them in accordance with the aforementioned criteria.

Most of the balance of this paper describes the two Remotivation Services at the State Hospital. Much that is said would also apply in large measure to the Remotivation Service at Crafts-Farrow, with some qualification because the level of functioning of the average patient is lower at the latter institution and there is a larger admixture of mentally retarded individuals.

Before turning to the situation at State Hospital, it should be mentioned that one building at Crafts-Farrow has been renovated and staffed more adequately, with the help of a $100,000-a-year federal grant, in order to demonstrate that it is possible to remotivate long-term mental patients and return them to their homes. Patients in that building are all long-termers with little if any contact with families or friends. Through intensive care a number of them have been released from the hospital and have been

able to adjust successfully to normal community life for a year or more.

The Remotivation Service at State Hospital is divided into Remotivation I, which has more of the recently-admitted and younger patients; and Remotivation II, which has more elderly patients and more who have been in the hospital for long periods of time. Patients are transferred to these services if, after a reasonable time on the Admission-Exit Service, there seems to be no immediate prospect of their going home.

In these two Remotivation Services there are 52 wards ranging in size from 20 to 105 beds, some open (i.e., unlocked during the day with all patients having yard privileges), some closed, and some closed but with a number of the patients having yard privileges. The physicians on the Admission Service attempt to send their patients to the wards most suitable for them and further transfers are made within the Remotivation Services as the patients' conditions change.

The treatment being given the patients on Admission-Exit is continued after their arrival in Remotivation, as are the efforts to help them return to the community; and it has been the pleasant experience of Remotivation physicians that a certain number of patients transferred to them as probable candidates for a long hospitalization promptly go home. For the majority of transfers, however, a longer stay is indicated; and it is the task of Remotivation personnel to see that the necessary treatment is continued; that physical illnesses are treated; that patients are given as much responsibility (especially in terms of yard privileges and job assignments) as they can handle; and that planning for their release is begun when their condition seems sufficiently improved.

Since the patients in Remotivation have already been worked up and since acute problems are less common than in Admission-Exit, the Remotivation Services are not as heavily staffed as are other parts of the hospital (The overall shortages of physicians is also a factor). There are, for example, positions for five physicians on Remotivation I and for three physicians on Remotivation II; and with one position vacant at the present time, there are seven physicians for the present census of approximately 2,600 patients, providing a physician-patient ratio of approximately 1 to 370. Although this compares favorably with continued treatment services of the other state hospitals in this region, it is far from ideal and more certainly could be accomplished if Remotivation Services were staffed in accordance with the standards of the American Psychiatric Association, which would give a ration of 1 physician to about 150 continued-treatment patients, with corresponding increases in Nursing Service and Social Service personnel.

Each physician in Remotivation is assigned a certain number of wards with, at present, a total number of between 300 and 400 patients, for whose psychiatric and medical care he is responsible. Consultants are available in the medical and surgical specialties, but the initial care of physical illness and proper referral to a clinic or consultant is the responsibility of the ward physician, and occupies much of his time, thus limiting his already limited opportunities for psychiatric treatment. In spite of this, a consistent effort is made to re-evaluate the patients at regular intervals, with a physical examination and mental status study at least yearly, and with briefer progress notes and review of orders during each three-month period, or more frequently as necessitated by changes in the patient's condition.

When, on such a review, a patient's condition seems sufficiently improved, Social Service is notified; and if the family situation seems favorable, the patient is brought before the staff, where he is seen by several members of the Remotivation

staff, including at least two physicians. If the staff agrees that the patient probably could adjust outside the hospital, the patient's release is approved, and the family is given official notice, through the Registrar's Office, that the patient can leave the hospital either on trial visit or discharge, according to the recommendations of the staff. With some patients, the family initiates the request for release by talking with the ward physician or social worker, and these requests are also dealt with at the staff meetings mentioned heretofore. At present, such staffing conferences are held weekly in both Remotivation Services, with Remotivation I staffing about 20 patients and Remotivation II about 5 patients each time, although cases involving special problems, usually legal in nature, are seen at a weekly administrative staff attended by physicians from all services.

So far in this article, most of the emphasis has been on the activities of Remotivation physicians, but other personnel are at least as important as the physicians in supplying the patient's needs. Nursing assistants (formerly, called psychiatric aides) are in close contact with the patient throughout his stay. In addition to the care which they supply the patient, the nursing assistants are able to give other personnel descriptions of the patient's usual, everyday behavior. The social worker, the worker in occupational therapy and recreation, the vocational rehabilitation specialists, and the chaplain all offer help to the patient while he is in the hospital, and in their various ways help evaluate and prepare the patient for release.

As may happen in other large organizations, however, the efforts of personnel in various departments tend at times to become uncoordinated; and it was in an effort to overcome this difficulty that a special program was set up in Remotivation some five years ago. A building with two wings with 49 and 50 beds, respectively, for female and male patients, with a central area for a dining room, recreational area, and offices, was selected; and a treatment team set up, which included physicians, nurses, a psychologist, a social worker, a chaplain, consultants for Occupational Therapy and Vocational Rehabilitation, and a group of nursing assistants who were permanently assigned to the building. The plan was to provide an intensive treatment area for Rehabilitation patients, and by means of conferences attended by members of all disciplines to insure that all personnel knew what each of their colleagues was attempting to do. Though faced at times with shortages of personnel, the program has continued to operate to the benefit of the patients; and while at present most patients selected for the building are well along in their recovery and in need primarily of release planning and vocational counselling, it is hoped that the program can be expanded to the point that more disturbed patients can be accepted for treatment.

Other patients in the large Remotivation population are in need of various types of special care, and these are grouped primarily in Remotivation II where there are wards (with extra personnel assigned) set aside for the physically handicapped, the blind, and those with chronic physical illnesses; and also for those relatively few patients for whom maximum security precautions are necessary.

In whatever area the patient is placed, however, in both Remotivation services, in closed or open wards, an effort is made to have the patient accept whatever job assignment is within his abilty. These assignments range from simple tasks around the ward to paying jobs outside the hospital, but in each case it is felt that the doing of useful work is of benefit to the patient. In the case of a patient for whom release planning is underway, a job assignment may help in preparing him to resume the responsibilities of life out-

side the hospital; but even for those patients who will remain hospitalized for long periods of time, assignments may help maintain a feeling of a more normal and satisfying institutional life.

The activities of the Recreation Service are also very important in helping patients maintain a more normal outlook. Regularly scheduled activities like dances and movies and an occasional entertainment (such as a circus on the hospital grounds) provide bright spots in what could otherwise be a rather monotonous life.

Since the physician's time per patient is limited, heavy reliance is placed on tranquillizing medication, mainly of the phenothiazine type, with anti-depressant medication being used when indicated. Electro-shock treatment is available but is rarely used on the Remotivation Service, since the medications mentioned above are readily available, easier to use, and (for the type of problem usually encountered in Remotivation) about equally effective as electro-shock. Some group therapy is done, and while at present this is largely limited to the special program described earlier in the article, plans are underway to extend this form of treatment to other parts of the service.

In summary, it may be said that Remotivation I and II at South Carolina State Hospital make up a large continued treatment service, with approximately 2,600 patients who vary widely in their need for psychiatric treatment and who are cared for on wards which vary from minimally-supervised to maximum-security areas. The usual procedures for the treatment, periodic re-evaluation and release of these patients have been described.

Facial Nerve Decompression—J. L. Sheehy Arch Otolaryng 87:241-242 (March) 1968

Two cases of facial nerve paralysis showing dramatic recovery following decompression of the temporal bone emphasize the fact that decompression is of value in selected cases. The nerve excitability test is the most reliable guide to selection of these cases. Decompression from the geniculate ganglion through the stylomastoid foramen can be accomplished without disturbing the anatomy of the ear or the hearing.

Continuing Education for All of Us—John M. Fleming Southern Med J 60:251-253 (Mar.) 1967.

It is generally agreed that the explosion of knowledge in the physical and biologic sciences, and improvement in medical skills and technology can produce but one result in the practice of medicine. The result is fragmentation of the field of medicine and the rise of specialism with a limited scope of practice. Some of us have wondered if this situation has produced the best of patient care. There is a definite shortage of specialists in certain fields of medicine. The layman gets the impression that specialists are more highly trained, yet the general practitioner can take care of 90% of the human illnesses. Miller made the following statement, "The final aspect of the issue of specialization versus generalization is the appropriate education of each." However, before starting a dialogue on this subject, we should make sure what the difference is.

The situation is quite different in comparing the generalist with the specialist. When one refers to the specialist as living in the ivory tower, he merely means that these learned specialists are out of touch with the realities of the active practice of medicine. It would be a rewarding experience for any specialist to step out of the ivory tower from the secure office of Field General to the front lines of the medical practice.

Lidocaine in Management of Arrhythmias After Acute Myocardial Infarction—O. E. Jewitt, Y. Kishon, and M. Thomas. Lancet 1:266-270 (Feb 10) 1968

The value of intravenous lidocaine (Xylocaine) in the management of arrhythmias after acute myocardial infarction was assessed. Of 27 patients with frequent ventricular extrasystoles, adequate suppression was achieved in 24 by using a continuous intravenous infusion of lidocaine, 1 to 2 mg/minute. Ventricular tachycardia was terminated in 11 patients by a single intravenous injection of 1 to 2 mg/kg body weight, without resort to DC cardioversion. Lidocaine was of little value in the management of supraventricular arrhythmias. Hemodynamic studies in eight patients showed no deleterious side effects after intravenous lidocaine in this dosage. Lidocaine may be the anti-arrhythmic drug of choice in the management of ventricular arrhythmias after acute myocardial infarction.

COMMUNITY MENTAL HEALTH SERVICES

ALEXANDER G. DONALD, M.D.
Deputy Commissioner, Division of Community Mental Health Services, S. C. Department of Mental Health, Columbia, S. C., and

HUGH M. SHERER
Special Project Director, Division of Community Mental Health Services.

South Carolina was among the first of a group of states to recognize the importance of progress in the prevention and care of mental illness in the community. As concrete evidence of this recognition, a mental health program was initiated in Columbia in January, 1923. The mental health clinic was located in the City Health Department and was held each Thursday afternoon. Many of the referees were from the Associated Charities and in many instances were mentally ill people who had wandered away from their home seeking some solution to their problems. The first clinic served the purpose of a diagnostic and referral unit, making arrangements for hospital commitment if the person was a resident of the state, or if a non-resident, making arrangements for return to the person's state of legal residency.[1]

"There were increased demands from other areas of the state for the development of mental hygiene clinics and clinics were established in Florence and Orangeburg in 1927, Charleston in 1928, and Rock Hill in 1930. The clinics were then grouped into up-state and down-state groups—Rock Hill, Spartanburg, Greenville and Anderson comprising the up-state group, and Florence, Orangeburg and Charleston comprising the down-state group. These clinics were conducted one day a week on alternate weeks. The Columbia clinic was held one day every week. Annual reports indicate that the number of people seen in these clinics ranged from 500 to 800 annually and the total number of visits made by patients at times was well over 2,000. Consultation was rendered to physicians in each community, and often the probate judges would request consultation prior to committing a person to State Hospital."[2] This program became a heavy one and at times several hospital staff physicians were involved. Dr. W. P. Beckman was a leader in the community movement and others to be mentioned are Drs. J. Moss Beeler, E. L. Horger, C. J. Milling, E. W. Long, and G. B. Carrigan.

This small beginning in the area of community services soon gained favor with the medical profession and social service organizations. Mental hygiene societies began to spring up over the country. "Because of the National Mental Hygiene Movement and because of local interest growing in the state concerning mental health, it seemed proper that South Carolina would want a Society for Mental Hygiene. On September 10, 1927, a small group of interested people met in the office of Dr. C. Fred Williams, Superintendent of the State Hospital, to discuss the possibility of such a society. It was agreed by this group to have a meeting for the organization of such a society and this was held at the Jefferson Hotel, November 8, 1927. Dr. George Stevenson and Miss Clara Bassett from the National Committee for Mental Hygiene were guests, and assisted in the meeting. As a result of this meeting, the South Carolina Society for Mental Hygiene was organized and Dr. Sylvia Allen, who was then practicing psychiatry, with a special interest in child psychiatry, in Charleston, South Carolina, was elected the first president. It was felt that there was a

need for the appointment of committees to represent various areas of interest and the following committee chairmen were appointed: The Committee on Care of the Insane and Epileptics—chairman: Dr. E. L. Horger; Committee on Public Schools—chairman: Miss Ida M. Colson, Charleston, S. C.; Committee on Universities—chairman: Dr. Croft Williams, Columbia, South Carolina; Committee on Social Agencies—chairman: Miss Ethel Sharpe, Columbia, S. C.; Committee on Public Health—chairman: Dr. J. I. Waring, Charleston, S. C."[3]

In 1947, Public Law 487, the National Mental Health Act, was passed and provided, among other things, funds for mental hygiene services at the community level. The first permanent clinic to appear in South Carolina after World War II was in Charleston, and it began its activities on July 1, 1947. Soon after this, in November 1947, a part-time clinic began in Spartanburg which soon developed into a full-time service and through the years other permanent community clinics emerged within the state. There was no set pattern for the development of these clinics other than the existence of community interest and support, in many cases fostered by the local Mental Health Associations.

In 1961, the Community Mental Health Services Act was passed by the South Carolina Legislature. In general, the 1961 Act made available to all counties in South Carolina grants-in-aid and an administrative framework for development of community mental health services. The Community Mental Health Services Act allowed for:

(1) Participation by all counties in the development of mental health services;

(2) Local initiation and control of community mental health services with state support;

(3) Grants-in-aid from local government on a 50-50 matching basis (matching local with state funds);

(4) A set limit of 25 cents per capita per year on the amount of state money available to counties for development of local mental health services. Note: The per capita limit was raised to 50 cents by the 1966 Legislature.

(5) Creation of Community Mental Health Boards to take administrative responsibility for assessment of mental health needs and program development in appropriately-sized geographic population areas;

(6) Development of a mental health program which might offer the following services: diagnostic and treatment services; aftercare services for the mentally ill, mentally retarded or emotionally disturbed; consultative services to schools, courts, and public or private health and welfare agencies; informational and educational services to the general public, lay and professional groups; collaborative and cooperative services with public health, education, welfare and other community groups for the prevention of mental illness, mental retardation and other psychiatric disorders. Note: Flexible programming was stressed, consistent with the belief that mental illness is associated with a broad spectrum of physical, social, cultural and economic factors.

Division of Community Services

The division in the Department of Mental Health organization that works most closely with the administrative boards provided by the Community Services Act is the Division of Community Services. It is administered by Alexander G. Donald, M.D., deputy commissioner. A component organizational structure of the division is the Mental Health Education Unit, which historically has worked for the promotion of mental health services and education throughout the state. A professional staff of seven people carries on the work of the division. Some of the major areas in which they have recently been involved include program development, community services, consultation to related professional

and lay groups, research and evaluation projects, and in-service education and training.

Training Programs

The Division of Community Services also administers a stipend training program for graduate education in the mental health professions. At present, 17 students are enrolled in graduate training programs in the areas of adolescent psychiatry, clinical psychology, psychiatric social work, occupational therapy and clinical pastoral education. This constitutes a marked increase in the number of trainees over the past year and is believed to be a giant step toward providing an adequate number of professionally trained persons for the community clinics and centers.

Community Clinics

At the present time, there are fourteen mental health areas within the state. Areas are determined on a county basis, and range in size from one county to seven counties. Twelve of these areas have community mental health clinics operating on a full-time basis. A thirteenth area, consisting of Georgetown, Horry and Williamsburg counties, has a Mental Health Board appointed and working toward providing services for that area. The recent activation of a fourteenth Mental Health Board in Orangeburg completes the statewide network. It is anticipated that the clinic serving the Orangeburg area will begin operation shortly after July 1, 1968.

These community clinics are staffed with psychiatrists, psychologists, social workers, mental health nurses and other personnel necessary for an effective program. Attempts are made in all of the clinics to provide service quickly and to avoid waiting lists and other delays. Several innovations have evolved such as group intake, more group and family therapy, and more consultative contacts with agencies providing related services.

The Community Mental Health Services Act of 1961 paved the way for expanded statewide community mental health services in South Carolina. In 1963, however, South Carolinians began talking about and planning for comprehensive community mental health centers with the passage of the Community Mental Health Centers Act (Public Law 88-164).

Comprehensive Community Mental Health Centers

Through this Act, federal construction funds were made available on a 2-to-1 (2 parts federal, 1 part local) matching basis for the construction of community facilities in which comprehensive care for the mentally ill would be provided. Federal funds for staffing these programs were also made available under Public Law 89-105, an amendment to the Community Mental Health Centers Act.

The comprehensive community mental health centers differ from the mental health clinics in *two fundamental ways*:

1. Comprehensive community mental health centers will provide five basic services:
   a. In-patient (hospitalization)
   b. 24-hour emergency service
   c. Out-patient
   d. Partial hospitalization (i.e., day care, night care)
   e. Consultation and education
2. The comprehensive centers will serve populations of not fewer than 75,000 and not more than 200,000.

The provision of in-patient care at the community level requires hospital beds and more trained personnel. Larger facilities and staff are also necessary for partial hospitalization services and 24-hour emergency services. These three services represent distinct additions to a community mental health treatment program. They comprise the essential difference between mental health clinics and comprehensive mental health centers.

Comprehensive community mental health planning will affect the quality as well as the quantity of mental health services. Not all mental health problems can

or should be treated in a clinic setting. Some forms of mental illness necessitate hospitalization or at least partial hospitalization. Other mental health "crises" require on-the-spot attention or emergency intervention. Quality of service may be further refined in terms of specialized services for emotionally disturbed children, mentally retarded children and adults, the aged and the alcoholic.

The five essential services and the specified population served by a comprehensive community mental health center are basic program requirements for access to federal construction and staffing grants. However, the total program defines "truly comprehensive care" in terms of rehabilitation and pre-care or after-care services; long-range plans for research into community mental health needs, evaluative research of services and in-service training programs for staff.

A definitive concept of a comprehensive community mental health center develops as citizens answer these questions about their locality: What community mental health services are needed by our citizens? Who needs these services? And, How do we go about meeting these needs?

Proposed Centers

In six areas of the state, local citizens aided by the Division of Hospital Construction of the State Health Department, the Division of Community Mental Health Services, and federal consultants have submitted applications for construction and/or staffing of facilities to provide comprehensive mental health services. The six groups are Greenville General Hospital, Anderson-Oconee-Pickens Mental Health Center, Charleston County Council, Spartanburg Area Mental Health Center, Columbia Area Mental Health Center and Sumter-Clarendon-Kershaw Mental Health Center.

The Greenville General Hospital project calls for the comprehensive center to be a part of the $33 million hospital expansion which will take place during the next 15 years. All elements of the comprehensive service will be included in the new buildings, and new staff personnel will be able to work closely with each patient as he is assigned or moved to the service which best meets his needs. Construction of the center is under way.

The Greenville General Hospital approach may best be summed up with the following statement from their application: "We believe that through positive direction and leadership of the private psychiatric and other professional disciplines, we can integrate effectively all the elements of mental health care and provide a meaningful and significant program. It is further believed that we have an opportunity to demonstrate that a comprehensive community mental health center can be an integral part of a private, voluntary non-profit hospital. We welcome the challenge and with a sense of confidence balanced with humility pledge our best efforts."

The Anderson-Oconee-Pickens plan proposes the construction of a center that will house the out-patient, partial hospitalization and consultation and educational elements of the comprehensive program. In-patient and 24-hour emergency service will be provided by the Anderson Memorial Hospital. Agreements will be executed whereby a patient admitted to any element of the service will have access to other services as his particular condition indicates in the judgment of the professional staff.

The Charleston County Council project presents yet another plan for the provision of comprehensive mental health services. The building under construction is a joint venture involving the Public Health Department, Charleston Mental Health Clinic, Family Service Association, Speech and Hearing Clinic and the Vocational Rehabilitation Service. Funds from both the Hill-Burton program and the Community Mental Health Centers Act have been matched locally to finance the

structure. Plans are for housing out-patient, partial hospitalization and consultation and educational elements of service in the new Charleston Area Community Mental Health Center. In-patient, 24-hour emergency services will be provided in the adjacent Charleston County Hospital. Because of the proximity of many services in the project, it is believed that patients will receive maximum therapeutic benefits more quickly and at less cost to the patient and the community.

In Spartanburg, the Mental Health Clinic Board applied for construction and staffing funds and received approval from both local and federal funding sources. The construction will include a unit for partial hospitalization and will combine with the existing out-patient clinic and the in-patient service of the Spartanburg General Hospital to provide a comprehensive program. Recently completed at the Spartanburg Area Mental Health Clinic was a Hill-Burton addition which will allow the out-patient unit to provide additional service. Also, a unit has been constructed which houses a Vocational Rehabilitation Service unit which will greatly broaden the services for mentally ill persons in treatment at the center.

In Columbia, the Columbia Area Mental Health Center Board made arrangements to begin providing comprehensive services by utilizing a cottage at the William S. Hall Psychiatric Institute for the provision of in-patient and partial hospitalization services. This unit opened late in 1967, the first fully-activated comprehensive center in a six state region. The center will continue to provide out-patient services in another location and the emergency room at Columbia Hospital will provide emergency services. This operation is considered to be temporary and the ultimate plans are for the comprehensive mental health center to be an integral part of the new Columbia Hospital.

The Sumter-Clarendon-Kershaw Mental Health Center Board has received conditional approval of an application for construction funds to build a comprehensive center. No opening date has been set, but it appears that the Sumter-Clarendon-Kershaw area is well on the way toward the development of comprehensive community mental health services.

Differences and Similarities

In each of these projects, there are obvious differences. The types of construction are dissimilar—it is possible to have a comprehensive program without new construction; the programs and administration differ, but each is suited to the needs of the particular area it serves. On the other hand, there are many similarities other than the provision of the five basic service elements and the specified population area. Private physicians will be urged to follow their patients in the centers. Both formal and in-service training will take place. Research and evaluation will be integral parts of the programs. Pre-care and after-care services, rehabilitative and diagnostic services will also be common program elements.

The Future

The keynote for the future of community mental health might be called "extended efforts in continuity of care." All efforts will be made to help those citizens in communities interested in providing the elements necessary for comprehensive services. At the same time, it is recognized that all areas are not ready for this type of program, and efforts will be made to help all the communities in the state provide some realistic care for their mentally ill. This means close cooperation with the State Hospital system and institutions for the mentally retarded, with other community service agencies, professional and civic groups, and with the voluntary groups promoting mental health.

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X-RAY FILM OF THE MONTH

S. E. PUCKETTE, JR., M.D.
Charleston, S. C.



This film was taken on a 64-year-old white male who had been shot in the left knee 40 years previously. The bullet was not removed and the patient had had no trouble until the day prior to the taking of the film. He stated that he felt the ball move and subsequently had onset of pain, swelling and limitation of motion of the knee. A low grade fever developed. Physical examination indicated the knee to be swollen, tender, and its range of motion limited. The patella could be balloted. A soft tender mass was felt in the left popliteal fossa without bruit.

This is a case of acute and chronic synovitis secondary to deposition of lead in the synovial membrane, the lead having been absorbed from the bullet in the joint space. The bullet was free within the joint space and actually was noted to move in between the taking of an AP and a lateral film. The synovial mem-

brane is outlined by the lead deposited within it and one will note posteriorly a Baker's cyst.

This phenomenon of dissolution of a lead bullet bathed by synovial fluid and deposition of the particles of lead in the synovial membrane is a well established entity.[1] The first x-ray report dates back to an article by Nimier and Laval in 1901.[2] A chronic synovitis and arthritis is produced. At times enough lead has been absorbed to produce plumbism. Lead intoxication from this source is rare, but analysis of the literature indicates that bullets within joints are much more likely to produce lead poisoning than those lodged in other tissues.[3]

Initially, this patient was thought to have a pyarthrosis an was so treated. Subsequent laboratory data did not confirm this diagnosis. An arthrotomy was performed with removal of the bullet, the biopsy specimen indicated acute and chronic synovitis. Laboratory studies for evidence of plumbism were within normal limits.

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President's Page



WHAT MEDICINE FACES

We are living in an age of crises, at home and abroad, all of them affecting the physicians of this country either directly or indirectly.

From the news media there are many differing opinions about what should be done to solve our national problems. While we are deeply concerned about all the problems facing us, we must, necessarily, come to grips with the problem closest to us.

In the area of medicine rather drastic ideas are being proposed to alleviate the shortage of health personnel and reduce medical costs, e.g., prepaid medical plans and group practice. This would eliminate the private free enterprise system of medical practice and place our patients on the all-too-often impersonalized assembly line of clinical medicine. Neither patient, nor physician, would be happy, and the reduction in costs would be doubtful.

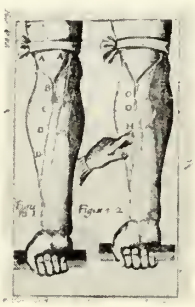
We must all give thought to these politically motivated ideas that would make us employees of the government and cause our patients to get second-class care.

We can avoid this only by our active support of prudent men, thereby doing our best to insure their election at all political levels. It is of utmost importance, in this election year of 1968, that we support and elect, nationwide, men who believe in the free enterprise system.

We can accomplish this by involvement of the medical profesison in politics to a greater degree than ever before. We are offered an opportunity to do so through SCALPEL and AMPAC. This is coordinated political action with the greatest impact.

THIS IS OUR CHALLENGE! WE MUST MEET IT!

Joel W. Wyman, M.D., President



Editorials

Medicare Moves On

O, Put not your trust in princes, said the psalmist, and present day experience might add to the already established conviction that politicians should be included in that admonition.

With the establishment of Medicare came the promise that there would be no interference with the usual and customary fees to which the physician was entitled. Now HEW is beginning to experiment with fixing fees (i.e. reducing voluntarily) in certain areas. If the findings are satisfactory to HEW, undoubtedly the regulation of charges will achieve a national compulsory status.

Suggestions include an arrangement for a single fee for an illness, for hourly rates, or for a retainer fee, as in the British panel system. The feasibility of group prepayment and per capita rates is to be investigated. Some physicians in group practice already are giving flat rates for Medicare patients. Another proposal is made that drug prices be fixed so that the patient would pay the cost for his brand-name medication over and above the cost of the generically labelled preparation.

It is strongly suspected that HEW wants to establish cut rate medical care, not for the sake of helping the patient, but in order to shore up the whole Medicare program. By this arrangement the physician will be penalized for governmental miscalculation.

The proposals have disturbed many practitioners who consider giving up their connections with Medicare in face of the growing threat of increasing regulation.

The Detail Man

There was a time when the detail man had little more than a memorized speech to give to his physician prospect, and often had little background to offer. Over recent years the improvement in the quality of his presentation has been very considerable, though we do not forget many pleasant and profitable sessions with the older generation.

Nowadays pharmaceutical firms take care to give thorough indoctrination to their peripatetic representative so that his discussion with his prospect can be an intelligent one. As an example, Wallace Pharmaceuticals gives a formal program of education to its detail men, including a course in such subjects as the cell, urinary fluids, cardiovascular diseases and the like, complete with texts, examinations and grades. At least five hours a week of home study are considered essential.

The entire Wallace field force of 350 representatives has chosen to take the course. Among them are the four who work in South Carolina; Robert F. Blakely, James N. Littlejohn, Boyce F. Rogers and W. C. Bagley.

This type of training would seem to be highly desirable for the man who must converse intelligently with the physician.

Requiem for a Gracious Gentlewoman

Died May 1, 1968 in the fifty-fifth year of her age, Waverley Psychiatric Hospital, formerly Waverley Sanitarium, all her life devoted friend of the aged, the distressed and the mentally ill.

Born in 1914, she lived through World War I, the great Depression of the 1930's, World War II and the years that followed, ministering all the while to those in need of psychiatric care and sympathetic nursing. During those years her patients loved her and appreciated her compassionate care, coming back to her time after time when they needed help. Their names read like a roster of South Carolina's finest

with scarcely a family from the mountains to the sea not represented.

Waverley performed a needed function in helping take some of the load off the State Hospital. It was a place where the acute psychotic could stay for a few weeks and go home re-oriented and refreshed. Yet seldom were the aged turned down when in need of prolonged care.

Waverley was a home-like place where each individual was someone special. The food was the kind one likes to think of as home-cooking, flavored with love. The grounds were spacious, the flowers beautiful and the buildings inviting and comfortable. Part of the woods to the South and East were almost virgin forest. The office building was a century-old family dwelling, the floor boards of mellow heart pine, nine to twelve inches wide.

Comparatively speaking, the rates were remarkably low, certainly within the reach of any family of average means, yet there was enough profit made to add improvements every three or four years. Among these were a complete sprinkler system, city sewerage, paved roads, drives and parking areas, an elevator, air conditioning and general renovations from time to time. Some years ago a large brick building was moved seventy-five feet down-hill and joined onto an older building. In 1962 a thoroughly modern wing was added, named the Memorial Wing in honor of the founders, Dr. and Mrs. James W. Babcock.

Like Goldsmith's Deserted Village, Waverley, in her heyday, was a happy place. For the young patients there was always hope, never the appalling sense of finality. Waverley was a place to tarry awhile, but a place to get well, a stepping stone to home. And for the old and helpless it was a place of rest, a place where care, loving care, was bestowed. A place where the last part of life's journey was made easy in a hundred little ways—like a bright ribbon in an old lady's hair or a flower in an old gentleman's buttonhole.

What insidious disease caused the death of this friendly and gentle lady? Not the burden of years, because as institutions go, she was still in her prime.

No, old age was not the cause. Waverley died of progress, drowned by the wave of the future, smothered under tons of paper, choked with ever more demanding regimentation and remote control. The wage and hour law made mandatory an eight hour shift. (Read three nurses in the place of two, three cooks, three orderlies, three of everybody, hence a thirty-three and one third percent increase in personnel and in expense.) Even before this there was a tax increase of over 1000%. For nearly fifty years Waverley had lived in the country. Suddenly by a narrow vote she was forced to become a city resident.

Then from the seats of the mighty came a voice commanding, "Get Accreditation." At first soft and persuasive this voice became louder and more insistent, with the warning "Insurance companies will refuse payment unless you're accredited." So everybody rolled up their sleeves and the long up-hill toiling commenced. Every imaginable sort of new and expensive equipment was required. Committees had to be formed, monthly staff meetings held. Then the inspectors arrived. I'm sorry for these gentlemen, they have a thankless job. It's their duty to find something wrong—they did—not enough utilization, whatever that is. So the doctors set about screening each other's charts and otherwise nit-picking.

Meanwhile the rates had to go up—and up—and up—to meet the ever expanding budget. No longer could the average family afford them. So vacant rooms began to appear .And when the ratio of patients to rooms reaches a certain level one can no longer operate without lowering standards. And that, of course, Waverley would never do. So May 1 has witnessed the demise of a gracious gentlewoman, not an old lady but a tired lady, unable longer to keep up the fight.

And we are inclined to make a sad prediction. There will be a good many more closings of small hospitals within the next few years. Many are hanging on by a

thread. Soon there will be room only for the large institutions which seem to thrive on the very factors which are slowly strangling the small. The small hospitals have been conducting a gallant rear guard action, but after all, a rear guard action is a retreat and everywhere the Organization Man is winning.

Accrediation was received April 24.

LETTERS TO THE EDITOR

To the Editor:

Your February editorial entitled "Psychiatric Doubts" is disappointing, to say the least.

Is it not dubious procedure for a medical journal to mount a rather general attack on a medical specialty on the basis of the unsupported testimony of a lay-led foundation?

Actually, the impression conveyed in the editorial is not even an accurate portrayal of the basic thrust of the American Schizophrenia Foundation. You say the president of the Foundation has been "casting aspersions on psychiatry". He has been making a practice of attacking a certain school of psychiatry—the psychoanalysts. But he does not attack all of psychiatry. A number of rather well-known psychiatrists are members of and advisers to his foundation.

Nor is the American Schizophrenia Foundation following roads "different from those of the psychiatrists". It is following roads charted in large measure by psychiatrists who believe that the most hopeful treatment approaches to schizophrenia are biological.

There are some good grounds for criticism of the American Schizophrenia Foundation. Some of its leaders are prone to make the type of broadside attacks that have been misconstrued, in part, and emulated, in part, by The Journal.

The foundation's leaders are also open to criticism for promotion "as a positive cure among the laity a therapy which has yet to be replicated with promising results by other researchers", according to Psychiatric News, the official newspaper of the American Psychiatric Association.

It is doubly unfortunate that some of these poorly-aimed broadsides have landed in South Carolina where psychiatrists are few in number but quite conservative in approach and where there are not enough analysts' couches to fill one small living room, much less form a "barricade" from which to return the attack, as your editorial suggested.

To be sure, psychiatry is still more art than science in many ways. Human minds and emotions are amazingly and marvelously complex. There is room for controversy and experiment. The same can be said about some other branches of medicine.

Despite the broad gaps that remain in knowledge and treatment methodology, much progress has been made, especially in the past few years. Our mental hospitals are treating more people more successfully. Psychiatric consultation is increasing in South Carolina. It would be most unfortunate if the good relationships which are developing were set back by unbridled attacks and misunderstanding.

One thing more: In the last paragraph of your editorial you used the word "insane". Modern psychiatry has been trying, with considerable success, to erase this word from common usage, since it connoted hopelessness and finality. The far more desirable expression, "mentally ill", has been substituted in our State laws and in general usage. May we have your help in this respect?

Sincerely yours,
William S. Hall, M.D.
State Commissioner of Mental Health

Dear Editor:

As a psychiatrist I would like to respond to the editorial "Psychiatric Doubts" in the February issue of the Journal. You state that in the field of psychiatry your confidence is low, your confusion high. You then support your skeptical position by reference to aspersions cast on psychiatry by "no less a person than the President of the American Schizophrenia Foundation". To the best of my knowledge this Foundation is chiefly known for its rather fervent espousal of a particular treatment for schizophrenia, which treatment does not as of now have the general acceptance of psychiatrists. Certainly there is "divergence of theory and practice in the field" of psychiatry but at this stage of our knowledge it is perhaps healthy that this is so. New findings are pouring forth in an increasingly rapid rate in this whole broad field from the biochemical, to the psychological, to the socio-cultural. (No, psychiatry is not "firmly embattled behind its baricade of interlocking couches"). There is much healthy ferment as I see it, and that we don't have all the answers should be no cause for despair.

The authoritative voice of psychiatry in this country is the American Psychiatric Association. As a long time member, I think I am reasonably aware of the policies, general philosophy, and sense of this representative body. True, there is some concern from time to time that psychiatry may be over-sold. And there is concern that the public have a more accurate knowledge of just what the psychiatrist is in terms of his educational background and function, especially with the expanding community mental health movement involving a variety of mental health workers in addition to psychiatrists. Finally, psychiatry shares with all medicine the somewhat tarnished image that the public today has of all physicians. In these affluent times, the physician is all too often seen as one species of

"fat cat", an appellation neither more nor less fitting the psychiatrist than other physicians. But I certainly get no feeling that because of some "divergence of theory and practice" psychiatrists find their speciality in a state of near chaos as your editorial seems to imply. Far from it. And while I have the highest respect for our Editor, I wish that he would either be more specific in his charges against psychiatry or be quietly content with "a certain mean enjoyment of the numerour jibes made of its practitioners" that he tells us has been his wont heretofore.

Jospeh H. Marshall, M.D.
Sincerely,

Dear Editor:

The February, 1968 SCMA Journal's Editorial, "Psychiatric Doubts" is a curious one. First, there is a question of the integrity of this example of editorial process. Author Barbara Tuchman comments, "It is easy enough with even a minimum skill in words to leave a loaded impression on the reader while evading the responsibility of being explicit, but the temptation is one that most writers who respect their profession will try to avoid."

Why is the field of psychiatry unclear to the author of the editorial? Would his specialty be completely understandable to a different specialist? Psychiatrists are not afraid to speak, publish, innovate, or change directions if it will prevent emotional disabilities or promote mental health. What is wrong with differences in practice if the approaches are ethical and the patient is rehabilitated?

Who is "no less a person than the President of the American Schizophrenic Foundation" and what is the "American Schizophrenic Foundation"? Is he concerned because the majority of physicians have not recognized him or his organization? By attacking a discipline, is he trying to gain allies; trying to be constructive, or is he being envious and destructive?

There are no "couch psychiatrists" in South Carolina; but even if there were and they helped emotionally distressed people, "hurrah" for them, for our State's all too few psychiatrists are already stretched thin in trying to meet the service demands expected of them.

It behooves the author that he not play editorial games with hard working ethical physicians, be they generalists, surgeons, pediatricians, psychiatrists, and so on, all of whom took the same Hippocratic Oath. I'm reminded of one of our dear Medical College Professor's favorite statement when there was "pussy-footing" around. "Shoot Luke or give up the gun."

Respectfully,
R. Ramsey Mellette, Jr., M.D.
President
South Carolina District Branch
American Psychiatric Association

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50 YEARS AGO

The Journal of the South Carolina Medical Association

May 1918

Dr. James A. Hayne was elected president of the South Carolina Medical Association.

An urgent call was noted for more doctors in the Army and Navy. The Committee on National Defense attended a meeting in Washington.

Dr. Kenneth Lynch presented a paper on the work of the Medical Advisory Board and the Draft.

Dr. Hayne presented a paper on the Epidemiology of Cerebro-Spinal Meningitis, referring particularly to an outbreak in the state in December 1917.

The cost of production for the Journal for the preceding year was $3,236.



Dr. Harriett E. Pinner has joined the staff of the Cancer, Heart Disease, and Tuberculosis Control Division of the State Board of Health as clinician. A native of Union, she received the B.S. degree from Winthrop College and M.D. degree from the Medical College of South Carolina. She and her husband have been in the general practice of medicine at Peak, S. C. since 1950. **Dr. Norman Sollod** has been named chief of the medical service at the VA hospital in Columbia. Dr. Sollod transferred from the VA hospital in Charleston, where he had been serving on the medical staff since January, 1967. **Dr. Donald E. Saunders Jr.**, director of the cardiopulmonary laboratory at the Columbia Hospital was one of three speakers featured at the fourth annual Midlands Seminar on Respiratory Diseases for Physicians at the VA hospital in Columbia. **Dr. Dale Groom** of Charleston has been chosen chairman of the American College of Physicians Board of Governors. Dr. Groom is governor for the state of South Carolina. **Dr. C. B. Futch** and **Dr. L. R. Matthews** have opened an office for the practice of general medicine at 3310 Rivers Avenue, Charleston.

Dr. William P. Hood Jr. has won the 1968 Young Investigators Award for his studies of the main pumping chamber of the heart. Dr. Hood, a research fellow in cardiology at the University of North Carolina School of Medicine at Chapel Hill, was graduated from the Medical College of South Carolina. **Dr. Rexford H. Hunt** has announced the opening of his office at 404 North Pine Street, Summerville for the practice of general and thoracic surgery. **Dr. J. T. Taylor** has reopened his office in Summerville for the practice of medicine after spending two years in the U. S. Army. **Dr. W. A. Wallace**, a native of Spartanburg and chairman of the County Board of Health since 1952, was honored recently by the Spartanburg County Medical Society as Doctor of the Year. **Dr. Curtis P. Artz** of Charleston has been elected to serve a three-year term as chairman of the Committee on Trauma. South Carolina doctors who have recently been re-elected to membership in the American Academy of General Practice include **Dr. Swift C. Black**, **Dr. Rufus Haynes Cain Jr.**, **Dr. James Gardner Johnson**, **Dr. William O. Whetsell**, **Dr. Henry Wright Gibson**, **Dr. Joseph Lipton Goodman**, **Dr. Reginald E. Gregory**, **Dr. Thomas Parker**, **Dr. William H. Thames**, **Dr. William J. Bannen Jr.**, **Dr. La Rue Merida Medlin**, **Dr. Lonie Clarence Floyd**, **Dr. Harold H. Jeter Jr.**, **Dr. Winston Y. Godwin**, **Dr. Andrew Henry Hursey**, **Dr. Marvin Hampton McLin**, and **Dr. Arthur Simons Jenkins**. **Dr. Clarence W. Legerton Jr.**, **Capt. Bertrand V. Cue Jr.**, **Dr. Lea B. Givens** and **Dr. James C. McAlpine** have been recently honored by election to the American College of Physicians. **Dr. Ben Sullivan Tatum** has become a Fellow of the American College of Obstetricians and Gynecologists. **Drs. Walter Moore Hart** and **David C. McLean**, both of Florence, were among the physician consultants selected by the American Academy of Pediatrics to evaluate the medical aspects of Head Start programs in nearly 2,000 communities in the United States.



Medical College of South Carolina

A grant of $1,106,000.00 has been awarded the Medical College of South Carolina to develop a comprehensive health care center for the approximately 25,000 medically indigent residents of Charleston County.

Founded by the Office of Economic Opportunity, the project will be under the direction of **Dr. Franklin C. Fetter**, Dean of the School of Medicine at the Medical College. He will be assisted by **Dr. Milton Westphal**, Professor and Chairman of the Department of Pediatrics, and **Dr. John F. Finklea**, Assistant Professor of Preventive Medicine and Pediatrics.

Dr. Joe Carroll Chambers has been named Coordinator of the South Carolina Regional Medical Program. Dr. Chambers is a graduate of the Univ. of North Carolina School of Public Health and the Univ. of Tennessee College of Medicine. He is now health officer of the Jefferson County, Alabama, Dept. of Health and is an Assoc. Prof. of Public Health and Epidemiology at the Medical College of Alabama.

On April 1, a primary step in preparation for construction of two new Medical College buildings took place with the closing of Doughty Street between Ashley Avenue and Barre Street. The main entrance to the MCH has been temporarily relocated on Barre Street.

The J. W. Bateson and Co. of Dallas, Texas, has begun construction on the three-story student activities-administration-library building and the seven story basic sciences-dental school building.

The Dept. of Anatomy will teach a course in human neuroanatomy and closely associated topics beginning June 3 and running through Aug. 31. The course will be under the direction of **Dr. Isabel Lockard**, assisted by **Drs. Elsie Taber, Hilda Debacker, Ray Pennington**, and others.

Two members of the pediatric faculty have been named by the American Academy of Pediatrics to evaluate the medical aspects of Head Start programs in the Charleston area.

Serving as Head Start consultants will be **Dr. Milton C. Westphal Jr.**, chairman of the Pediatric Department, and **Dr. William Weston III**, assistant professor of pediatrics.

Dr. William W. Vallotton, chairman of the Department of Ophthalmology, on behalf of the Department has presented to **Dr. William M. McCord** a portrait of **Dr. Pierre G. Jenkins**, professor emeritus. Dr. Jenkins was honord for his many years of service to the Medical College.

MEDICAL ETV

On Thursday, May 16 fom 8-9 p.m. "Monitoring The Critically Ill Patient" will be shown from the University of California with I. Rappaport, M.D., Surgical Services, Fred P. Sattler, M.D., Research Surgery and Bioelectronics, and Edward A. Stemmer, Surgical Services.

Wilbur J. Cohen, a key proponent of medicare, was named by President Johnson to succeed John W. Gardner as secretary of Health, Education and Welfare.

Cohen, now 54, started with the federal government in the early thirties and helped draft the social security program. Recognized by Congress as an expert on social security, he was the leading architect of medicare and played a prominent role in getting Congressional approval of the program.

He had been undersecretary of HEW since June, 1965. For the previous four years, he had been assistant secretary of HEW.

At a news conference following his appointment to the top HEW post, Cohen foresaw health care accounting for as much as 50 per cent of total welfare costs. He urged that voluntary private health insurance be improved. But he said that he did not believe private programs could be improved sufficiently to eliminate the need for government help in dealing with the health care needs of low income groups and the disabled.

"Medicare and medicaid have had some impact on higher medical costs," Cohen said. "But I think doctors' costs are going to taper off. Hospital costs are going to continue to rise but there is a problem of antiquated and inefficient methods. This can be changed."

Soon after Gardner's resignation became effective, Cohen announced major steps in the reorganization of HEW's health activities. Unified direction of HEW'S major health agencies was assigned to Dr. Philip R. Lee, Assistant Secretary for Health and Scientific Affairs. Dr. William H. Stewart, Surgeon General of the Public Health Service, was named principal deputy to Dr. Lee.

Dr. Lee was given direct authority over the Public Health Service and the Food and Drug Administration. Dr. Stewart and Food and Drug Commissioner James L. Goddard, M.D., will report directly to the Assistant Secretary, while continuing to carry out their present administrative functions.

Dr. Lee's responsibility also was expanded to include overall health policy direction and coordination of other health programs, including medicare, medicaid and the health activities of the children's bureau.

In his 1968 message to Congress, President Johnson had directed the HEW secretary to submit "a modern plan of organization to achieve the most efficient and economical operation of the health programs of the federal government."

"In the past four years," Cohen said, "31 major new laws have been enacted that increase the Department's authority, responsibility and appropriations in the field of health.

"The total federal investment in health has grown from approximately $3 billion in 1960 to nearly $14 billion in 1968, and $16 billion proposed in 1969. Because of new programs, like medicare and medicaid, the HEW health investment alone has more than tripled in the past three years, from $2.6 billion in 1966 to $9.6 billion this fiscal year, and $10.9 billion proposed for 1969."

In a reassignment of agency responsibilities, the National Institutes of Health was expanded to include the present NIH, the Bureau of Health Manpower and the National Library of Medicine. The Health Services and Mental Health Administration was set up with responsibility for all other functions previously assigned to the Public Health Service. These two new agencies, along with the present Food and Drug Administration now make up an expanded and more comprehensive Public Health Service.

Dr. James A. Shannon, Director of the National Institutes of Health, was named Director of the newly constituted NIH. Dr. Robert Q. Marston, Director of the Division of Regional Medical Programs, was named Acting Administrator of the

Health Services and Mental Health Administration. Dr. Goddard continues as Commissioner of Food and Drugs. The heads of these three agencies will report directly to Dr. Lee under the new organizational setup.

BLUE CROSS-BLUE SHIELD

Workshops for Medical Assistants and Hospital Business Personnel were held throughout the State March 19-29. The meetings, which lasted from 9:30 A.M. to 3:30 P.M., were held in Rock Hill, Spartanburg, Anderson, Greenville, Florence, Myrtle Beach, Charleston, and Columbia.

Attendance and participation was excellent at the meetings, which dealt primarily with Medicare. Medical Assistants representing approximately 600 physicians throughout the State attended. Our thanks to the Medical Assistants for their interest and participation, as well as to the physicians who made it possible for their Medical Assistants to attend, in order to help us to help you.

An additional 180 Hospital Business Personnel attended the joint meeting of the two groups.

It was indeed gratifying to the staff members who developed and participated in the meetings to note the cooperative and enthusiastic attitude of these groups. The material presented was well received, and we feel that the meetings were most profitable.

Plans are under way for another series of Workshops in the Fall.

Hospital News

McLeod Infirmary in Florence has announced plans for an estimated $1 million expansion of its facilities in downtown Florence. Hospital Administrator Kenneth L. Gallier has announced that the infirmary is planning to construct a new surgical suite which would include six operating rooms. Also included in the expansion program are a physical therapy department, cobalt therapy units and radioisotope laboratory facilities.

Cannon Memorial Hospital's new 18-bed wing has been named for two doctors who practiced in Pickens for many years. They are the late Dr. Reese Allgood and the late Dr. John L. Valley.

Meetings

"Public Health Trends" will be the theme for the 45th Annual Meeting of the South Carolina Public Health Association at Myrtle Beach on May 23-25, 1968. The theme will be keynoted by Lt. Governor John C. West and Dr. Abel Wolman, Professor Emeritus of Sanitary Engineering at Johns Hopkins University, at the opening session at 2:00 P.M., May 23. Section meetings will occupy the schedule on Friday, May 24. Dr. Jacob Koomen, North Carolina State Health Officer, will be featured at the closing session on Saturday, May 25.

The American College of Physicians will present "Infectious Diseases: Mechanisms and Manifestations" June 19-22 at the University of Maryland School of Medicine in Baltimore.

Co-directors are Dr. Theodore E. Woodward and Dr. Richard B. Hornick. For further information contact: Edward C. Rosenow Jr., M.D., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Smallpox Vaccine as 'Cure' for Warts

Treating the common wart with smallpox vaccine is reportedly achieving impressive success. Direct injection of a small amount of weak smallpox vaccine has resulted in the disappearance of 164 warts in 59 of 60 patients. The success of the procedure appears to be based on viral interference, with one virus fighting another that causes warts.

THE ROLE OF PREPAYMENT PLANS IN THE PATTERN OF FUTURE RELATIONS BETWEEN GOVERNMENT AND STATE MEDICAL ORGANIZATIONS

WILLIAM SANDOW

I have been asked to comment on the role of prepayment health care plans in the pattern of future relations between government and State Medical Organizations.

I am speaking only for myself and not for the National Association of Blue Shield Plans or anyone else. I think it is quite obvious that where a Blue Shield Plan has been designated a carrier under Part B of Medicare the involvement will be considerable. What is not so obvious, since the carrier role is still a relatively new one, both in terms of function and time of existence, is what the task may ultimately prove out in so far as effectiveness for, and acceptance by, the medical profession is concerned. I will say, though, that in great measure both our efectiveness and acceptance depend heavily upon you and your attitude towards us.

Hap Hassard made a pretty accurate, although perhaps understated, forecast in 1965 when he concluded a speech at the AMA Conference on Medicare with these words:

> "As a lawyer, as a medical society executive, as General Counsel for NABSP, I know that the carrier under Part B will be cast in a trouble-filled role. However, I also believe that Blue Shield is equipped to serve the Medical Profession in a carrier role if this is Medicare's wish. . . ."

At the outset of Medicare and the performance of the carrier function, and perhaps even yet, many physicians felt that the medical profession and Blue Shield were "playing on opposite sides of the fence." Physicians, long opposed to government intervention in medical affairs in any manner or guise, were now faced with a *fait accompli*. Rebellion and resentment manifested themselves in varying degrees in many directions. Blue Shield received its share—all the way from being a general "whipping boy" to being credited with having practically single handedly initiated, written, and enacted into law the whole program. The complex nature of the program, with deductibles for different time periods that carried over into one another, co-insurance factors, mountainous paper work, the rules for which seemed to change with the weather, managed to keep Blue Shield "in the middle" and a continuous target for complaints.

Forgotten for the time were a few facts. Like the fact that Blue Shield opposed Medicare legislation all the way, suggesting instead that the government purchase health care coverage from Blue Shield and private health insurance companies for the needy and near-needy, with governmental support related to need. Like the fact that local Blue Shield Plans worked hand in hand with local Medical Associations and AMA field representatives to distribute literature, provide speakers, and sponsor advertising as a means of pointing out the desirability of preserving the American concept of health care and the private doctor-patient relationship. Like the fact that after the Medicare Law was passed in July of 1965, Blue Shield did not have any discussions with the Social Security Administration until after the AMA Board of Trustees in August of 1965 took action and at that time urged Blue Shield Plans and the National Association of Blue Shield Plans to play an important role in the administration of Medicare. Like the fact that in an overwhelming majority of cases, the local medical society supported the Blue Shield

Address given at the Seminar of the American Association of Medical Society Executives in Chicago, June 1967.

Plan as the carrier of choice under Part B and, to my knowledge, no Plan indicated a willingness to handle the task without such sanction.

With the passage of time and events, much of the Medicare-oriented resentment toward Blue Shield has diminshed. Undoubtedly, just the passing of time has had much to do with this change. On the other hand, physicians who strongly opposed federal medical legislation in the beginning—although still basically opposed in principle—are, on the whole, now experiencing little dificulty because of it. Indeed, they are prospering.

In addition, physicians are more and more becoming aware of the position that Blue Shield has held all along in regard to Medicare and like programs and appreciating the fact that this basic position has not changed despite the carrier role; moreover, once having accepted the responsibility of administering the program, we have worked unceasingly to perform our duties in this connection with as little disruption to the practice of medicine as possible, confident that in so doing we are performing a valuable service to both the citizens covered by the program and the medical profession. The degree to which the situation has changed can be measured by the fact that some medical associations which formerly opposed Blue Shield's acting as carrier have now come out in favor of it and that there has been strong support, both locally and nationally, for the concept of using Blue Shield wherever possible in the implementation of Title XIX programs.

At this juncture, I think the important point to recognize is not so much that the attitude of the medical profession has reversed itself but that *what it has done once, it can do again.*

As I previously stated, the carrier, or so-called "buffer role" between physician and government, is truly a new one in terms of both function and longevity. There may be some surprises ahead for all of us. While we have from the very outset of the program, even back to the earliest contract negotiation days, fought the good fight for administrative simplicity, a look at the win-loss column is not an encouraging omen for future successes. Friends of mine on the Carrier Representative Committee report equal ineffectuality, and people from my own shop who have been invited as consultants to SSA, return from the experience with considerable frustration.

I cite these facts not in terms of criticism, chagrin or despair, but only to alert you to the fact that there are some areas of Medicare which may be very abrasive to the medical profession which have not yet, either by chance or design, been made the subjects of any real pressure. Pressure, which if once decided upon, will be exerted through the carrier, tending simultaneously to squeeze the buffer and from which the buffer may not be able to unsqueeze or buff.

Some possibilities that quickly come to mind are as follow: What is going to happen when or if the $3.00 per month charge for Part B has to be increased? And no doubt it will have to be either because it was too low in the first place, or utilization, and/or fees have both increased, neither an unnatural or unusual phenomenon. Will the physician be blamed for greedily escalating fees or the carrier be charged with loose and improper reasonable charge determinations? Will the carrier be ordered to clamp down or go to set fee schedules?

What happens if it is determined that the direct payment procedure is unnecessarily burdensome and complicated to the elderly beneficiaries and carriers are directed to pressure physicians into more assignments? What will be the reaction if carriers are ordered to audit physicians' books to determine that charges to nonmedicare patients are the equivalent of Medicare charges for like services? If any, all, or similar episodes take place, will Blue Shield suddenly cease to be a Cinderella saviour and become an ugly agent of socialism? As long as Blue Shield functions as a carrier under Medicare

and or other like programs, it will undergo a continuing test of its abiilty to represent the physician and play a true carrier role as opposed to being merely a fiscal and administrative agent of the governemnt. Medical organizations, I feel, can make a distinct contribution to the profession they represent if they can understand and help interpret to the physician the difficult and pressure-filled role of the carrier—a role which, incidentally, we may be forced to some day relinquish if the pressures too severely strain our physician ties. To do this will require a high order of statesmanship and enlightened self-interest on your part both as individuals and medical organization executives. To resolve the many questions which may arise in the best interest of both the public and the medical profession may be a difficult and tedious, but certainly a worthwhile and rewarding, task. While some may read into this charge the conditions for an ultimately untenable relationship between the Blue Shield Plans and Medical Associations, it need not be so, indeed must not be so.

I say this because in a very real sense this is a very parallel situation to that with which we have already lived for years.

Fundamentally, the common denominator of our relationship is the medical profession. The difference between us is in our orientation and commitment to the profession. Your's is perforce total because you are a physician organization solely. Ours is not total because we have considerations outside of the medical profession *per se* with which we must live. We need physician approval to be a Blue Shield Plan and physician cooperation to exist as one. At the same time we must cope with public and consumer attitudes as well as the competitive pressures of the market place. When at times the feelings of the medical profession do not coincide with those of the buying public, Blue Shield finds itself in a dilemma between the two.

All I am trying to say, and I hope without being too obtuse about it, is that this same situation may occur, perhaps even more easily, when a government agency represents, at least in matters of health care, a large segment of the public and we have certain contractual obligations to them. The dichotomy may be even more dificult to overcome if the position taken by the agency in the "public interest" is the result of considerations beyond the ken of those of us who may not entirely understand the mind politic.

I say all of this a preamble to what I know you will be delighted to hear is a conclusion. That conclusion is, that as I see it, there are essentially two roles to be played by prepayment plans in the future relations between organized medicine and the government . . . And parenthetically, I might add, perhaps only prepayment plans could perform these roles. One of these is the carrier role whereby with your cooperation and understanding the medical profession can focus its forces to deal with already established governmental programs. The second of these roles is as an underwriting mechanism whereby the expansion of governmental programs to encompass either more benefits or more people is made unnecessary.

If every other country which has embarked on some form of governmental medicine or health care program is any pattern, there will be pressures for expansion of present programs until the total population is covered. If this is to be prevented, much must be done by everyone involved in the manufacture, delivery or payment for health care. All of these segments of the industry, if you will, must be concerned with organization, cost, and accessibility. We must recognize the public's pressures for comprehensive health care and a corresponding dissatisfaction with higher costs.

If the physician is to help shape the future of health care—and I think he wants to—desirably should and of necessity must, individually and with his collegues collectively, act intelligently to guide developments rather than react emotionally

to events that have occurred before he seemingly even knew they were about to happen.

I am afraid many times the busy and preoccupied physician fails to realize that the average individual has and reflects a far different view of his own personal physician than he holds of doctors collectively. Not realizing this, a physician may not always be aware of the fact that the feelings and interest of the general public do not necessarily coincide with his own.

Medical organizations, and more particularly you as the individuals heading up such organiztions, are in a unique position to help the public understand the complex philosophy and feelings of the medical profession while at the same time helping to interpret to the medical profession that which is concerning the public about health care.

I read an interesting article by Stewart Alsop on the plane to Chicago based on the thesis that history has shown that generals don't necessarily know all about wars and have many times been wrong. I was prompted to draw as a paralled the thought that all the answers to health care problems don't reside in Washington either. The only problem is that that's where they'll come from unless we all come up with some of our own and do something about them. Not only for prepayment plans but for all of us, this is the crucial role.

Mr. Sandow's prediction of increased premiums for Medicare has already been fulfilled.

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BLUE CROSS - BLUE SHIELD OF SOUTH CAROLINA

ROY L. GRADY
DIRECTOR OF ENROLLMENT

It is a pleasure to report to you that 1967 was our most successful year for Blue Shield of South Carolina from an enrollment standpoint.

At the outset it is appropriate that I review our recent political or at least legislative involvement.

This past year, Blue Cross-Blue Shield underwent a complete Legislative Study by what was known as the S-3 Committee composed of members from the House, Senate and Appointees made by the Governor's Office. This committee was chaired by Senator Harrelson and the final eight recommendations made by the committee were:

(1) Repeal of Chapters 13 and 14 of Title 37, which authorized Blue Cross and Blue Shield as tax-exempt, charitable and benevolent institutions;

(2) Re-chartering of the companies to continue under the present charter and sell the same insurance, but to be taxed and regulated as mutual insurance companies;

(3) Authorization for any commercial company to write the same type insurance as Blue Cross-Blue Shield; I might add that in my opinion there is nothing to prevent them from doing so already.

(4) Provision that all companies writing such insurance be given equal consideration for hospital discount contracts;

(5) Extension of Blue Cross-Blue Shield authority to convalescent, extended care and nursing homes;

(6) Empowering of Insurance Commission to control health insurance rates;

(7) Creation of a study committee to investigate hospital rates;

(8) Specification that writers of partial coverage plans built around Medicare or Medicaid must fully inform persons that there may be a reduction in the number of available beds due to non-compliance of some hospitals to the Civil Rights laws.

Bills to implement these recommendations have been introduced in both the House and the Senate. With respect to the suggestion that we be taxed, it should be fully understood that since we do not operate for the purpose of making a profit, any increased costs imposed by taxation will of necessity be passed to our subscribers in the form of higher dues or operating expenses.

It is needless to say that each time this Committee met during the year . . . the Blue Cross and Blue Shield Plans were subjected to much confused, erroneous, and sometimes bad publicity, but as I commented, we are happy that in spite of all this adverse publicity we had a record year in enrollment gains. In 1967, Blue Shield gross enrollment was 34,707 contracts with a net gain after cancellations of 13,158 contracts totalling 32,158 new members. This represents an overall increase in Blue Shield enrollment during 1967 in excess of 10%. Worthy of note is that our percent of gain was exceeded by fewer than ten of the 83 Blue Shield Plans. From this experience, I guess one could surmise that bad publicity and what may be deliberate distortion of the facts cannot harshly affect an organization which was founded on the principle of public service in the health care field and continually strives to improve both its effectiveness as well as its efficiency.

Let us consider for a moment the question of efficiency or performance of the Plans. Since its inception in 1947 Blue

Address to the Medical Association
February 18, 1968

Cross of South Carolina has provided over 103 million dollars for benefits on behalf of its members. This is a return of slightly more than 92 cents on the dollar. Blue Shield of South Carolina has for professional services provided since 1950 better than 35 and one-half million dollars or a return of slightly better than 86 cents on the dollar. These are records unmatched of course by any profit-oriented insurance companies and have a double importance, for all of these funds go in direct support of South Carolina's health care complex. As a sidelight on this point, it has been estimated that if all the money being spent in this State for hospital insurance were channeled through Blue Cross, our hospitals' income would increase approximately $1,000 per bed per year. And I believe doctor income from health coverage would be likewise increased if Blue Shield handled all the money spent. Or, putting it another way; in 1965, foreign and domestic insurers in South Carolina collected 53 and one-half million dollars in health insurance premiums and paid out in health benefits only 41 million dollars. These underwriting profits would have paid all this state's public welfare health care expenditures for 1966 more than five times over.

For your information, when we add our 1967 Blue Cross and Blue Shield Dues income to the dollars handled for Medicare Parts A & B, we are doing an annual business of more than 45 million dollars.

Now for Blue Shield in 1968. During the year we expect to raise the level of those few remaining contracts with the $250 surgical fee schedule to $325 and to sell even higher benefits throughout the state. Additionally, we project a probable claims payment of over four and one-half million. This is supported by a very bright outlook as far as our enrollment gains are concerned. We expect an increase of approximately 11% in Blue Shield enrollment plus what could be a bonanza in net gain if we can contract with the textile companies.

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CONTINUITY OF HEALTH CARE

E. KENNETH AYCOCK, M.D., M.P.H.

The technological advances in Medicare are expanding at a rapid pace, demanding ever-increasing specialization of knowledge resulting in the increasing probability of further fragmentation of health services. We have reached a point in time when it would seem appropriate for each of us to take a close look at continuity of services offered, levels of care rendered, and continuing services which we provide for our patients.

Continuity of health care is a component of comprehensive health care, a goal toward which we are planning and working. Continuity of care occurs when a personal physician refers a patient to a specialized diagnostic or treatment center, and then follows up on the care and advice given by the center after the patient returns home; when the physician draws up a home care plan to be carried out jointly with the nurse, therapists, social worker, or aides; when a physician is not content to exercise and diagnose the ills of a patient, but helps that patient get the needed treatment or rehabilitation; when health records are passed on from one physician to another; when a hospital staff helps a patient plan for his return to home and work; or when the doctor, nurse, and therapist work together over a period of several months helping the stroke patient recover his mobility.

One of the roles of your county health departments is to help the physician provide continuity of health care to his patient. Thirty-four county health departments are certified under Medicare to provide home health services under a plan for furnishing such services established and periodically reviewed by the patient's physician. In addition to the skilled nursing service offered by these 34 county health departments, 14 of them offer physical therapy, 5 offer speech therapy, 4 offer occupational therapy, one offers medical social service, and 21 offer services of a home health aide. At present, the home health services program is on a shoestring basis, primarily utilizing personnel already fully occupied with public health duties, because insufficient funds were available to employ adequate staff. We hope in the next six years, through physicians' recognition of the values of such services, and hence utilization, to achieve optimal staffing in every county.

Physicians may contact their local health department to learn what services are offered in their county.

Today, with more people living longer and developing more chronic, debilitating diseases, the foremost health problems are chronic illness and disability, which are frequently accompanied by emotional, social, and financial difficulties. These patients often need health services other than those of a physician, services which the physician cannot provide in his office but which the community may be able to provide on a multi-county basis.

It is critically important to make full use of available medical manpower. The physician is neither nurse, social worker, nor physical therapist. He is a physician. His training and talents as a physician must not be dissipated by employing them —except in critical situations—in any tangential, nonmedical discipline. With South Carolina ranking 47th in the nation in the physician-population ratio, there is not enough of him in the State today to warrant wasting a minute of his education and experience on jobs others can do as well. Because it is necessary to face up to this fact squarely and make the most efficient use of limited physician manpower, health care functions not requiring medical training should be delegated by the physician to other members

of the health care team to the maximum extent practical.

Today in many areas in South Carolina there is a shortage of hospital beds and also an over-usage of existing beds, in that often patients remain in the hospital longer than necessary. Surveys of general hospital patients in the United States show that between 20 and 30 percent of those who remained hospitalized for 30 days or more were no longer there for medical reasons. The use of services of allied health workers in nursing homes, or in the patient's home when the acute phase of illness has passed, will release hospital beds, enabling the general hospital to fulfill its primary responsibility, the care of the acutely ill.

For example, once the stroke patient gets over the acute phase and is not in danger from bleeding or dislodgement of the clot, he can be moved to an extended care facility or to his home, and the other members of the health care team can be called in to assist with early rehabilitation.

What is needed is comprehensive and continuing health care, including not only the diagnosis and treatment of illness, but also its prevention, and the supportive and rehabilitative care that helps a person to maintain or to return to as high a level of physical and mental health and well-being as he can attain.

An all-out effort to achieve continuity of health care is urged. Continuity of health care can become more than a pious aspiration; with purpose, cooperation, and coordination it can become a reality.



NEW MEMBERS

Dr. John A. Aycock, Jr.
Mt. Pleasant
Dr. Donald H. Blodgett
Walhalla
Dr. Robert E. Bell, Jr.
Columbia
Dr. Robert P. Bland, Jr.
Columbia
Dr. Emmett W. Flynn, Jr.
Marion
Dr. Henry G. Kelley, Jr.
Spartanburg
Dr. Katherine L. Lovett
Spartanburg
Dr. Samuel K. Morgan
Charleston
Dr. Harvey Oberman
Charleston
Dr. F. Johnson Putney
Charleston
Dr. Bernard Schencker
Columbia
Dr. James T. Wiggins
Columbia
Dr. John B. Willis
Lancaster
Dr. Robert D. Wootton
Spartanburg
Dr. Herbert V. Rast
Swansea

DEATHS

Dr. William J. Beasley

Dr. William J. Beasley, 88, Hartsville physician, died March 12. A native of Darlington County, Dr. Beasley studied medicine at the Medical College of Virginia in Richmond and received his M.D. degree from the Medical College of South Carolina.

In 1905, he opened his medical practice at his home in Ashland in Lee County, and in 1922 moved to Hartsville.

A member of the medical staff of the Byerly Hospital since its beginning, he was unanimously elected last year as a "lifetime honorary staff member for help-in bringing modern medicine to the Hartsville community through 63 years of untiring service." He was a member of the Darlington County, Pee Dee, South Carolina and American Medical Associations and held a 40-year service plaque from the last.

Dr. Maurice Lyndon Townsend

Dr. Maurice Lyndon Townsend, former mayor of Society Hill, died March 23 in a Darlington clinic after a short illness. He was 91.

Dr. Townsend was born in Richmond, Ind. and moved to Society Hill in 1940. He was president of the Darlington County Medical Society and was a member of the North Carolina Medical Society and South Carolina Medical Association.

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Book Reviews



RESPIRATORY PHYSIOLOGY edited by N. Balfour Slonim, M.D., Ph.D., John L. Chapin, Ph.D. The C. V. Mosby Company, St. Louis, 1967, 199 pages. Price: $8.75

Interest in chronic pulmonary disease in the past 25 years has stimulated a great deal of clinical and basic physiologic investigation in the field of respiration and respiratory physiology. As a consequence medical literature presenting current concepts and explanations of respiratory physiology and pathology has been voluminous. This monograph, a recent offering in this field, is a review of the physiology of respiration, gas laws and clinical pulmonary physiology, and its application in pulmonary function evaluation. Acid-base mechanisms as affected by respiratory function are reviewed and explained. A chapter on the regulation of respiration is included, and a chapter on responses to unusual environments such as high altitudes, underwater and aerospace. In spite of the authors' efforts to clarify and at times simplify some aspects of acid-base relationships and regulation of ventilation, many aspects of these important features of pulmonary patho-physiology will remain obscure to many readers even after study. The complexity of these subjects and the inability to discuss them without use of complex formulae and diagrams contribute a deterrent to their easy understanding. Nevertheless, as a concise and thorough exposition of the subject of clinical application of respiratory physiology this book has much to offer to students and physicians interested in this field.

Kelly T. McKee, M.D.

A HISTORY OF WHITTEN VILLAGE. By Benjamin Otis Whitten. Jacobs Press Inc., Clinton, S. C. 1967. Pp 188.

Whitten Village had its beginnings in 1920. From then until now its destiny has been in the capable hands of Dr. Whitten, who has seen his institution grow from a rather primitive state to an efficient, well equipped plant.

The story of the village and of Dr. Whitten are inseparable. The record of the many trials, tribulations, arguments, backsets, and misunderstandings gives a concept of the difficulties which have beset the growth of the Village. The book tells the troubles of public misunderstanding, of difficulties with legislators and appropriations and it tells also of a steady development and improvement which has resulted in the successful growth of the present plant.

Dr. Whiten has retired after nearly 50 years of association with his beloved institution. Without his concern, his dedication and his constant sustained efforts, the Village could never have been what it is today.

J.I.W.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

HIPREX

Antibacterial-Urinary Rx

Manufacturer: Riker Laboratories

Non proprietary Name: Methenamine Hippurate

Indications: Long term therapy of acute, chronic and recurrent urinary tract infections.

Contraindications: Renal insufficiency, severe hepatic insufficiency, severe dehydration, and as sole therapeutic agent in acute parenchymal infections causing systemic symptoms.

Dosage: Adults and children over 12 yrs.: 1 Gm, bid. Children 6-12 yrs.: 0.5-1 Gm, bid.

Supplied: Tablets—1 Gm, bottles of 100

VALISONE

Corticoid—Local. Rx

Manufacturer: Schering Corp.

Nonproprietary Name: Betamethasone 17-valerate

Indications: Psoriasis, eczema, various dermatitis, lichen planus, lichen simplex chronicus, intertrigo, ano-genital pruritus, sunburn, miliaria.

Contraindications: Tuberculosis of the skin, viral infections with skin lesions.

Dosage: Apply topically one to three times daily.

Supplied: Cream—0.1%, tubes of 5 and 15 Gm.

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Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



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Vistaril®
HYDROXYZINE PAMOATE

an antianxiety agent that serves a human need...



"The danger involved in prescribing dependency producing medication for relief of anxiety lies in the fact that we do not know in advance the dependency proneness of the individual."[1]

A woman who is undergoing the emotional stresses of the menopause may, for the first time, need an antianxiety agent. But she may also be susceptible to drug abuse.

Vistaril can fulfill the need for tranquilization without creating a new need—dependency.

Vistaril calms anxiety and agitation quickly—usually begins to work in 15-30 minutes. And, in more than ten years of clinical use, after more than a billion doses to date, there have been no reported instances of dependency on hydroxyzine.

When the need for antianxiety medication is reduced or no longer exists, Vistaril dosage may be lowered or discontinued without ill effects.

Recommended starting dose, anxious menopausal patient, 50 mg. t.i.d.

With Vistaril, it is as easy to stop therapy as it is to start.



ithout
reating
new one.

Contraindications: Hypersensitivity to hydroxyzine. The parenteral solution, for intramuscular or intravenous use, *must not* be injected subcutaneously or intra-arterially.

Hydroxyzine, when administered to the pregnant mouse, rat, and rabbit induced fetal abnormalities in the rat at doses substantially above the human therapeutic range. Clinical data in human beings are inadequate. Until adequate data are available to establish safety in early pregnancy, hydroxyzine is contraindicated during this period.

Precautions: Hydroxyzine may potentiate the action of central nervous system depressants such as narcotics and barbiturates. In conjunctive use, dosage for these drugs should be decreased as much as 50%. Because drowsiness may occur, patients should be cautioned against driving a car or operating dangerous machinery. The usual precautions for intramuscular injection should be followed; soft-tissue reactions have rarely been reported when proper technique has been used. Hydroxyzine parenteral solution for intramuscular use should be injected well within the body of a relatively large muscle. In adults, the preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus), or the mid-lateral thigh. In children, preferably the mid-lateral muscle of the thigh. In infants and small children the upper outer quadrant of the gluteal region should only be used when necessary, as in burn patients, in order to minimize the possibility of damage to the sciatic nerve. The deltoid area should be used only if well developed, such as in certain adults and older children, and only with caution to avoid radial nerve injury. Injections should not be made in the lower and middle thirds of the upper arm. Aspiration should be done to help avoid intravascular injection. On reported intravenous injection a few instances of digital gangrene have occurred distal to the injection site, considered to be due to inadvertent intra-arterial injection or possibly periarterial extravasation. Therefore, particular caution (aspiration and site injection) should be observed to insure injection only into intact veins; avoid either intra-arterial injection or extravasation. Intravenous administration should be accomplished slowly, no faster than 25 mg. per minute, and not to exceed 100 mg. in any single dose. In order to avoid possible adverse effects it is recommended that hydroxyzine parenteral solution be diluted to at least 50 cc. with sterile normal saline and administered over a period of four minutes or more, preferably into the tubing of a running intravenous infusion.

The intravenous administration of this drug is not recommended for children under 12 years of age.

Adverse Reactions: Drowsiness may occur; if so, it is usually transitory and may disappear in a few days of continued therapy or upon dosage reduction. Dryness of the mouth may occur with higher doses. Involuntary motor activity, including rare instances of tremor and convulsions, has been reported, usually with higher than recommended dosage.

When this product is given intravenously undiluted, minimal amounts of intravascular hemolysis occur at the site of injection. Giving the maximum recommended intravenous dose (100 mg.) to adults results in immediate transient hemolysis with the liberation of a total of 2-3 grams of hemoglobin, which, in some individuals, can cause small amounts of hemoglobinuria. This compares with the normal red cell destruction from which approximately 8 Gm. of hemoglobin are liberated every 24 hours. If the hydroxyzine is diluted with 50 cc. of normal saline and given during a period of four minutes or more, this phenomenon does not occur.

Supply: Vistaril (hydroxyzine pamoate) Capsules: Equivalent to 25 mg., 50 mg., 100 mg. hydroxyzine HCl. Vistaril (hydroxyzine pamoate) Oral Suspension: Equivalent to 25 mg. hydroxyzine HCl per 5 cc. teaspoonful. Vistaril (hydroxyzine HCl) Parenteral Solution: 25 mg./cc.—10 cc. vial and 50 mg./cc.—2 cc. and 10 cc. vial; Isoject,® 25 and 50 mg. per cc., 1 cc. per unit.

More detailed professional information available on request.

References: 1. Greenhouse, H.R.: Medication and the Dependent Personality, Symposium of Non-Narcotic Drug Dependency and Addiction, The Amer. Psychiat. Assn., N.Y. County Dist. Branch, New York, N.Y., March 10, 1966.

Pfizer LABORATORIES DIVISION
New York, N.Y. 10017



burning



itching



discharge



of trichomonal vaginitis...

Flagyl®

tablets/inserts

brand of

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brings
• clinical cures
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For the most widespread form of vaginitis the most widely successful therapeutic agent, Flagyl, is clearly indicated.

In trichomonal vaginitis, most physicians have reported a cure-rate of 95 per cent or more with Flagyl when infected male partners are treated concurrently and when treatment is repeated for occasional refractory infections in women.

Among the few patients who do not respond to Flagyl are those who may not have taken the prescribed dosage and those who may have been reinfected.

This high rate of cure obtained with Flagyl is unparalleled. Only systemically active Flagyl reaches the hidden reservoirs of reinfection in male and female genitourinary tracts.

Indications: Flagyl is indicated only in the treatment of trichomoniasis in both the male and female.

Contraindications: Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution: Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side effects: Infrequent and minor side effects include nausea, metallic taste and furry tongue. Gastrointestinal disturbances, flushing and headache sometimes occur, especially with concomitant ingestion of alcohol. The taste of alcoholic beverages may be altered. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness or paresthesia of an extremity, joint pains, confusion, irritability, weakness, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

Dosage and Administration: In women: one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

In men: When trichomonads are demonstrated, one 250-mg. oral tablet twice daily for ten days in conjunction with treatment of his female partner.

Dosage Forms: Oral tablets—250 mg.
Vaginal inserts—500 mg.

SEARLE

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The AMBAR SCRAPBOOK of Obesity Oddities

FACT & LEGEND



NAPOLÉON BONAPARTE

LOST THE BATTLE OF WATERLOO BECAUSE HE WAS TOO FAT!

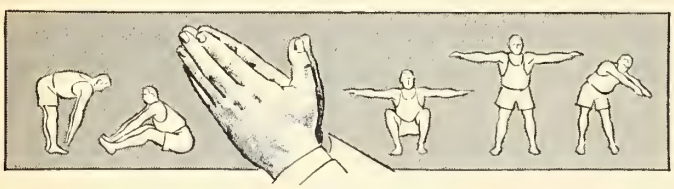
ACCORDING TO THE NEW YORK TIMES OF APRIL 13, 1890, THE DEFEAT OCCURRED BECAUSE HE FAILED TO CHECK HIS INTELLIGENCE INFORMATION. "IT WAS A MATTER OF MERE INDOLENCE AND THIS INDOLENCE WAS CAUSED BY FAT."

SOURCE: JAMA 186:65 (OCT. 5) 1963.

GALLSTONES HAVE BEEN FOUND IN 60% OF PATIENTS WHO WEIGH MORE THAN 300 POUNDS, 45% HAVE DIABETES, AND 15-TO-20% HAVE HIGH BLOOD PRESSURE.

SOURCE: DUNCAN, G.G.: SCIENCE NEWS LETTER, 83:403 (JUNE 29) 1963.





THE BOOK **"PRAY YOUR WEIGHT AWAY"** URGES READERS TO "ASK GOD TO HELP YOU LIKE EXERCISE" FOR 15 MINUTES A DAY.

SOURCE: REV. C.W. SHEDD: NEW YORK, LIPPINCOTT, 1958.

DIET DROPOUTS ACCORDING TO DRS. SHIPMAN AND PLESSET "APPARENTLY NO DIETER SUCCEEDS WHO IS VERY ANXIOUS OR DEPRESSED."* THE AMBAR FORMULA PROVIDES **METHAMPHETAMINE** TO HELP **ELEVATE** THE **MOOD** AND **PHENOBARBITAL** TO HELP REDUCE **ANXIETY**.

*SOURCE: ARCHIVES OF GENERAL PSYCHIATRY 8:26 (JUNE 1963)

CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

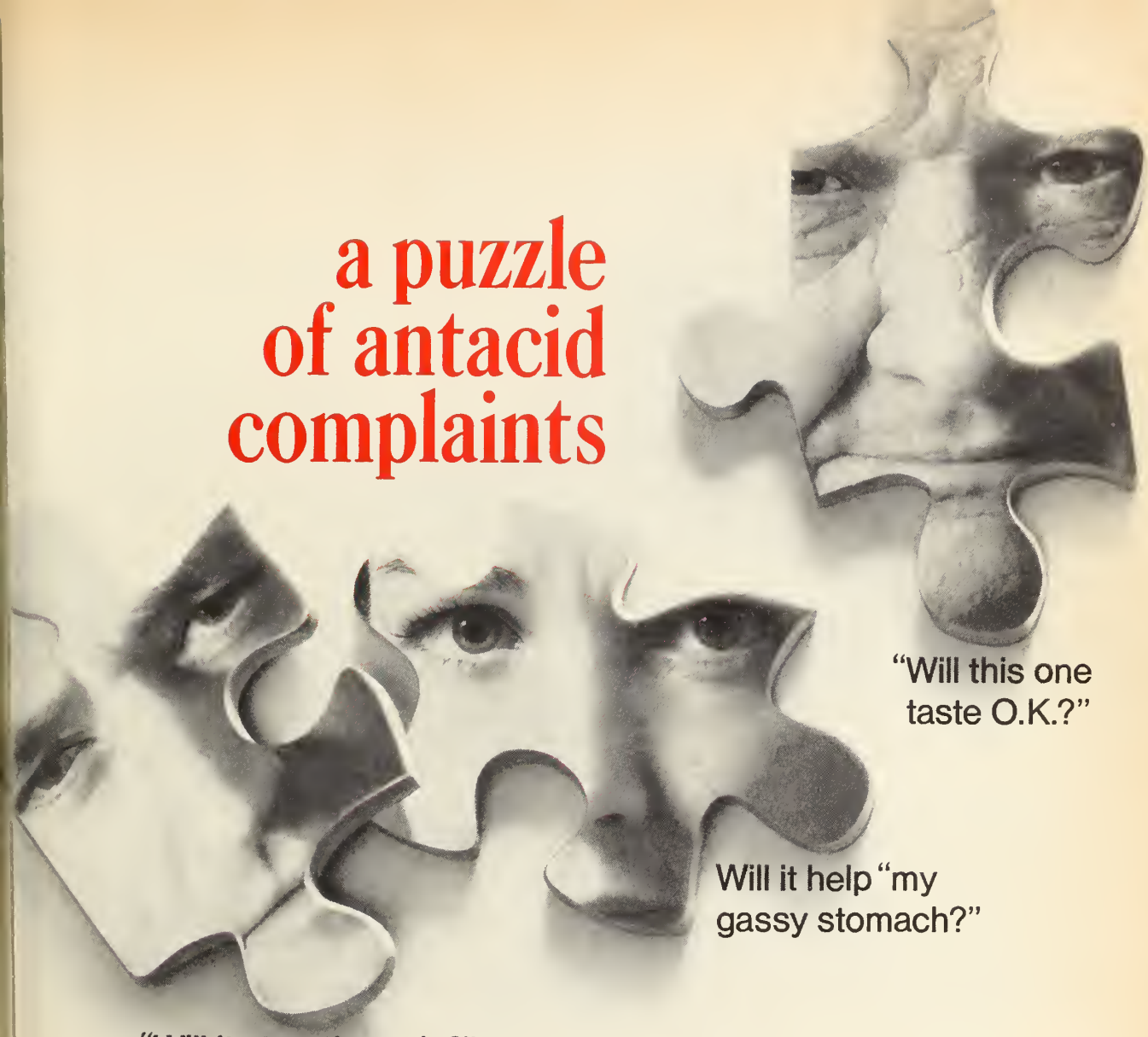
One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Am suppresses appetite and helps offset e tional reactions to dieting. **Contraind tions:** Hypersensitivity to barbiturates sympathomimetics; patients with advan renal or hepatic disease. **Precautions:** Administer with c tion in the presence of cardiovascular disease or hypertens **Side Effects:** Nervousness or excitement occasionally no but usually infrequent at recommended dosages. Slight dr iness has been reported rarely. See package insert for fur details.

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a puzzle of antacid complaints



Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

a solution to peptic ulcer distress

Effective neutralization—
with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

Concomitant relief of G.I. gas distress—
with the proven[1] defoaming action of simethicone.

Prolonged acceptance confirmed—
in 87.5% of 104 patients after a total of 20,459 documented days of therapy.[2]

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart

Division/Pasadena, Calif.
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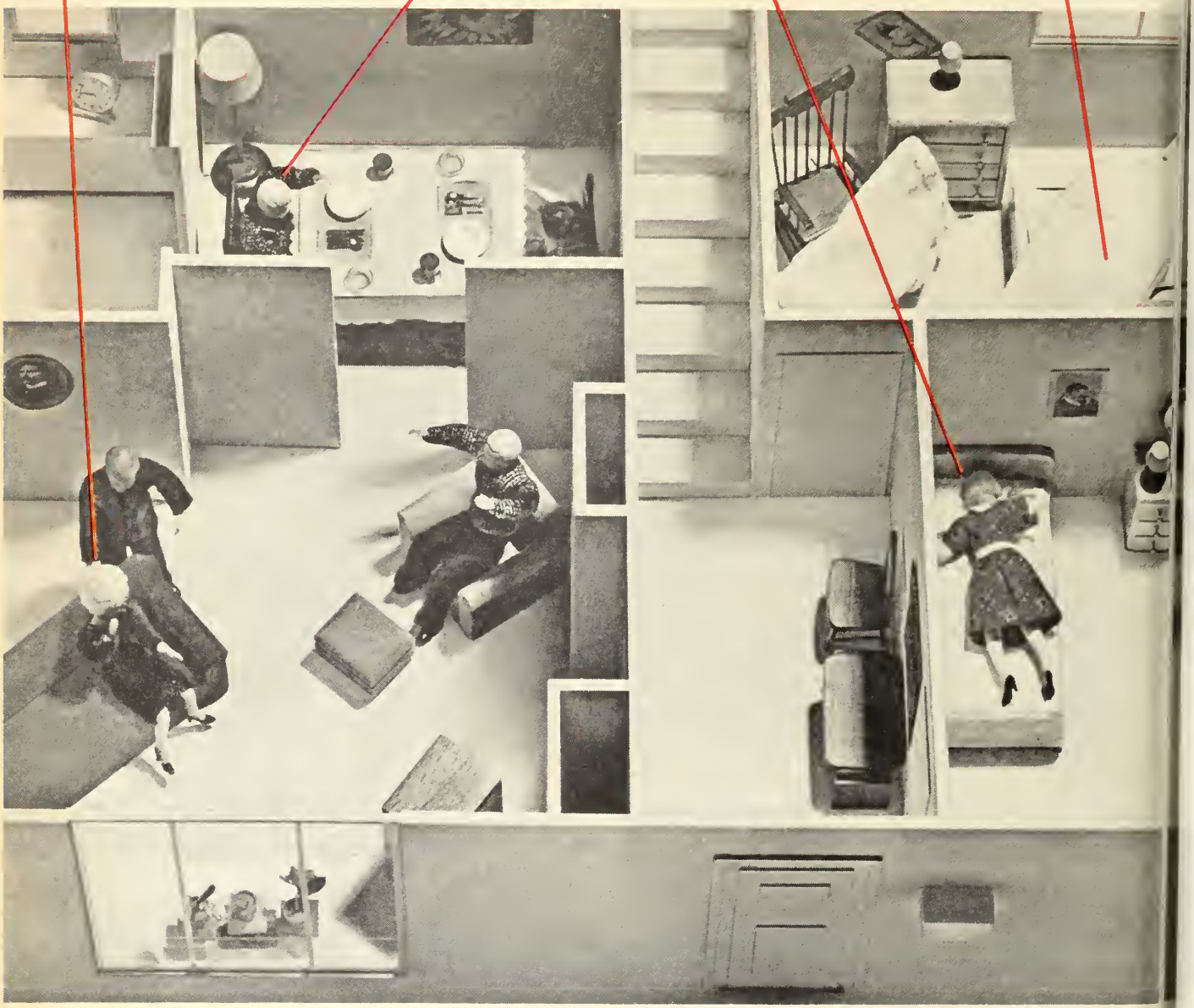
When the agitated geriatric disrupts the home...

His daughter can't please him. There is "just no living with him."

His disturbances at the table make every meal a nightmare.

His teen-age granddaughter won't invite friends home because of his outbursts.

His slovenly room and habits create more tension.



In moderate to severe anxiety...

- Mellaril helps control the most frequent symptoms: marked tension, agitation, apprehension, restlessness, hypermotility
- Mellaril often alleviates anxiety-induced somatic complaints
- Mellaril frequently helps strengthen emotional resources
- Mellaril helps the patient maintain realistic contact with environment, closer harmony with family

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, at pine, and phosphorus insecticides. Where complete mental ale ness is required, administer the drug cautiously and increa dosage gradually. In addition, orthostatic hypotension (espec ly in female patients) has been observ Epinephrine should be avoided in tre ment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism a other extrapyramidal disorders are frequent; drowsiness, especially in h doses early in treatment, may occ nocturnal confusion, dryness of t mouth, nasal stuffiness, headache, ripheral edema, lactation, galactorrh and inhibition of ejaculation are no on occasion; photosensitivity and ot allergic skin reactions may occur but extremely rare.

for moderate to severe anxiety

Mellaril®

(thioridazine)

25 mg. t.i.d.

SANDOZ

Before prescribing, see package insert for full product information.

When it's time for Thorazine® brand of chlorpromazine



...can you depend on less?

For profound calming effect in moderate to severe mental and emotional disturbances of everyday practice.

Before prescribing, see complete information, including adverse effects reported with phenothiazines and symptoms and treatment of overdosage, in SK&F literature or *PDR*. The following is a brief precautionary statement.

Contraindications: Comatose states or the presence of large amounts of C.N.S. depressants.

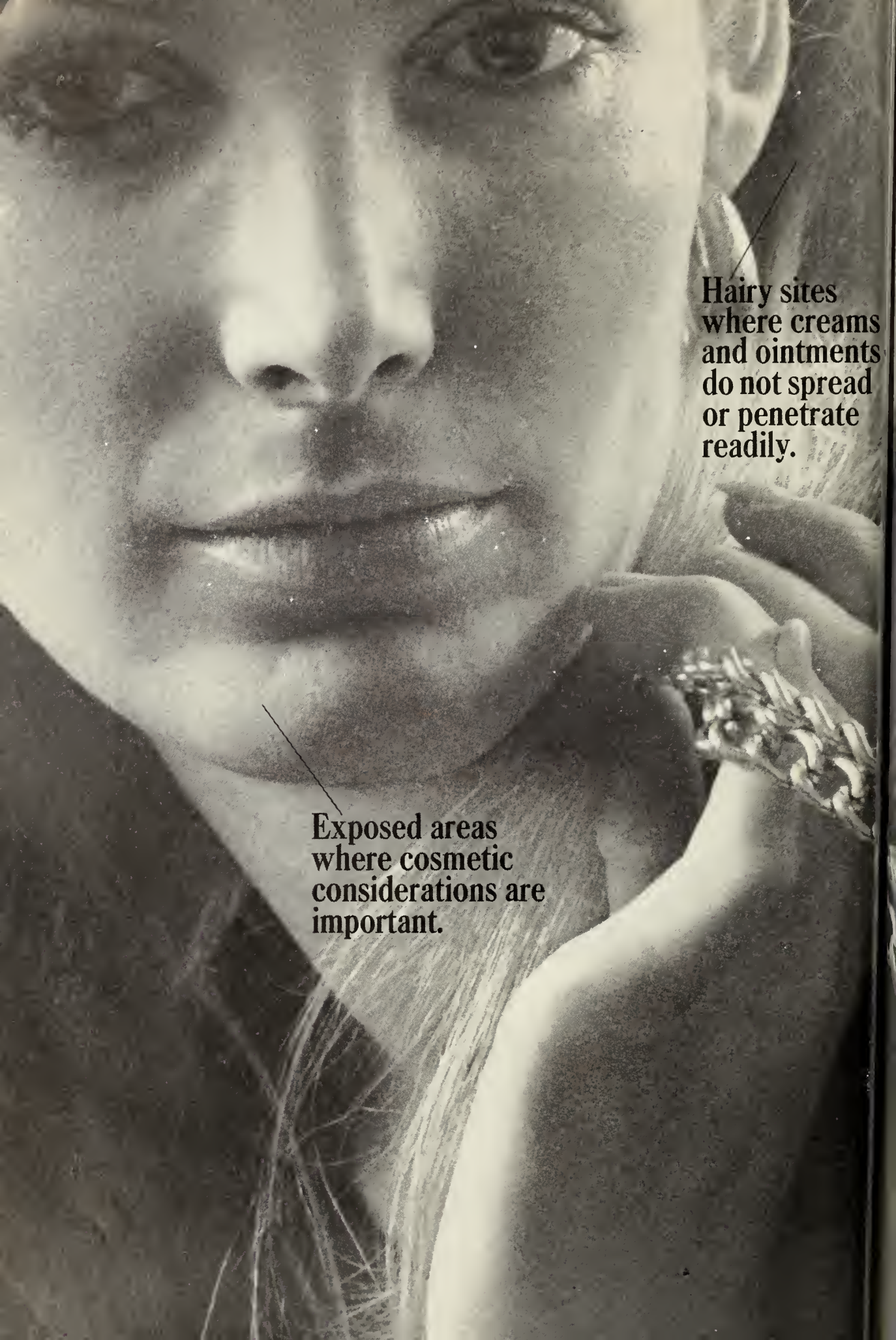
Precautions: Potentiation of C.N.S. depressants may occur (reduce dosage of such agents when used concomitantly). Use with caution in patients with chronic respiratory disorders. Antiemetic effect may mask overdosage of toxic drugs or obscure other conditions. Administer in pregnancy only when necessary. Because of possible drowsiness use cautiously and warn patients who operate vehicles or machinery.

Adverse Reactions: Drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; miosis; mild fever; weight gain; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosages (in rare instances, may persist); lactation and moderate breast engorgement (in females on high dosages); and less frequently, cholestatic jaundice (use cautiously in patients with liver disease). Adverse reactions occurring rarely, include: mydriasis; agranulocytosis; skin pigmentation; epithelial keratopathy; lenticular and corneal deposits (after prolonged substantial doses).

Available: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg.; Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg.; Injection, 25 mg./cc.; Syrup, 10 mg./5 cc.; Suppositories, 25 mg. and 100 mg.

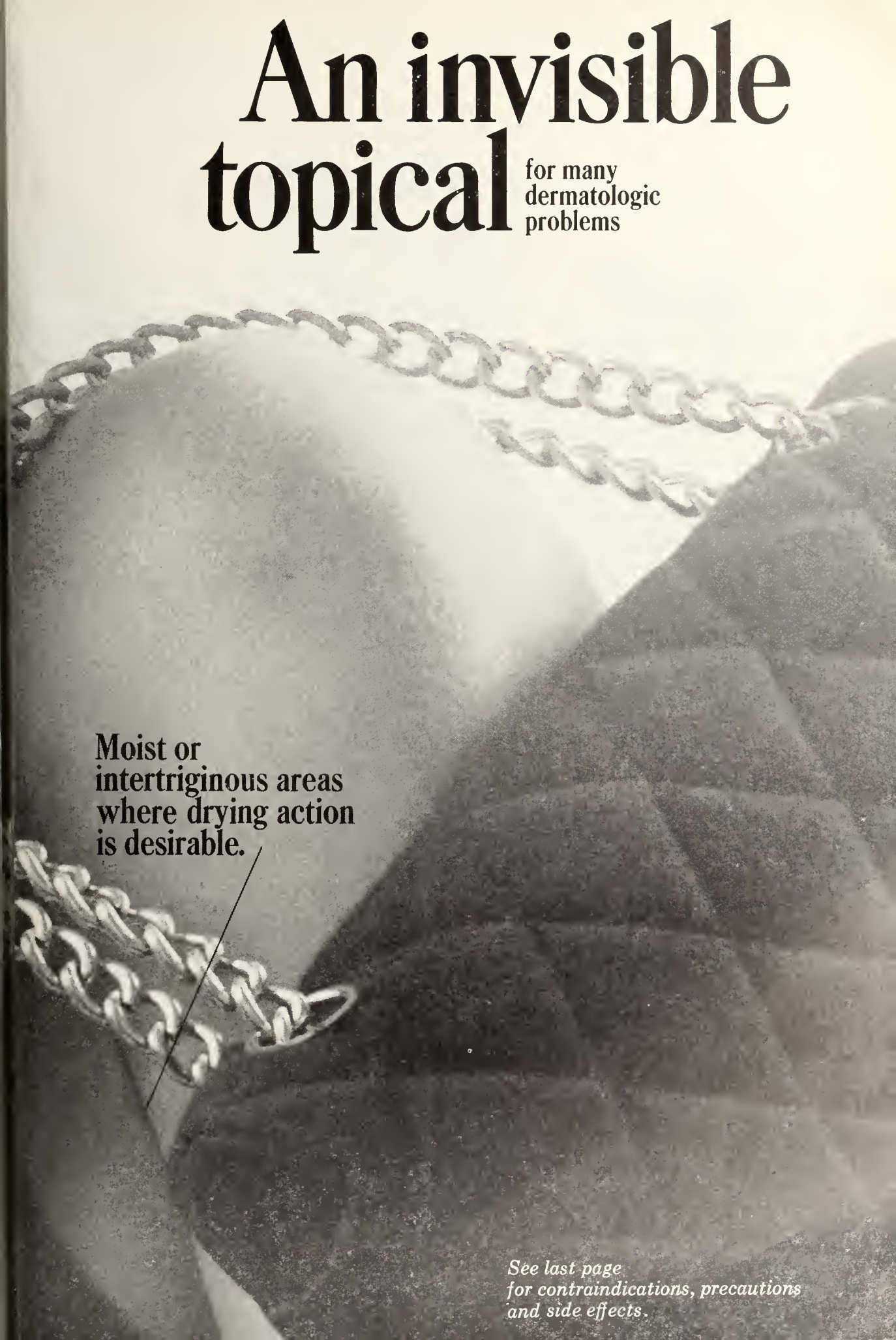
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Hairy sites where creams and ointments do not spread or penetrate readily.
Exposed areas where cosmetic considerations are important.

An invisible topical

for many dermatologic problems



See last page for contraindications, precautions and side effects.

Structurally unique topical steroid in propylene glycol vehicle produces rapid response in many dermatoses.

Synalar Solution produces rapid antiinflammatory, antipruritic action through its unique topical corticosteroid, fluocinolone acetonide. The propylene glycol vehicle provides additional benefits for therapy at problem sites where it is difficult to achieve contact between the lesion and medication – or where creams or ointments may make the lesions worse. Synalar Solution has proved particularly valuable in the symptomatic treatment of seborrheic dermatitis of the scalp, nasolabial folds, eyebrows, ears, and in flexural folds such as the axillae, inframammary, umbilical and anocrural areas. It has also been reported to achieve excellent results in the adjunctive management of atopic dermatitis, contact dermatitis, neurodermatitis, nummular eczema, psoriasis, and sweat retention syndromes in these problem sites.

Penetrates the hairy sites.

In many areas of the body, hair gets in the way of treating the underlying dermatitis. The propylene glycol vehicle of Synalar Solution permits penetration and dispersion at sites where creams and ointments do not readily penetrate. May be applied without matting of hair.

Ideal for moist or intertriginous areas.

Propylene glycol is strongly hygroscopic and is especially useful where sweat retention is a problem. Its low surface tension permits easy spreadability in difficult-to-treat body areas. A number of studies have also shown that propylene glycol has inherent antimicrobial activity.



Cosmetically ceptable 0 exposed areas.

h propylene glycol vehicle f ynalar Solution possesses ay useful cosmetic properties. le r and greaseless, it is o ticky or messy, will not a clothing or skin. n posed areas of the body h e cosmetic appeal is n rtant, Synalar Solution o s nothing but results.

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e use of the properties opylene glycol and the ilgram potency of inolone acetonide, a small a tity of Synalar Solution a long way. Also, the ription price of a 20 cc. a ic squeeze bottle of y lar Solution is surprisingly w Thus, your patients obtain o my with the proved cy of a potent, truly nced topical corticosteroid.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components.

Precautions: In some patients with dry lesions, the solution may increase dryness, scaling, or itching. Application to denuded or fissured areas, such as genital or perianal sites, may produce a burning or stinging sensation. If this persists and dermatitis does not improve, discontinue medication. Although propylene glycol has antiseptic activity, there should be careful initial evaluation and follow-up of infected sites. Incomplete response or exacerbation of lesions may be due to true infection, which requires susceptibility testing and appropriate therapy. On the other hand, saprophytic or low grade infections may clear spontaneously under the influence of Synalar Solution alone. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time.

Side Effects: Side effects are not encountered ordinarily with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions.

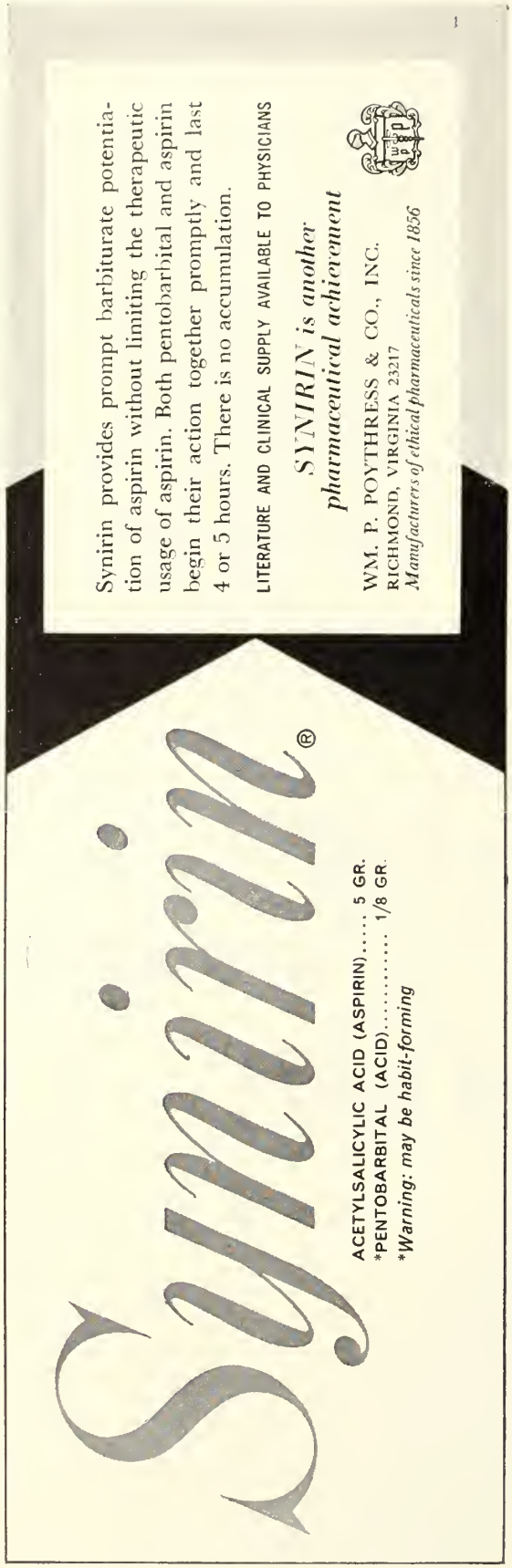
Availability: Synalar (fluocinolone acetonide) Solution 0.01% in a propylene glycol vehicle with citric acid as preservative. 20 and 60 cc. plastic squeeze bottles. *Also available:* Synalar (fluocinolone acetonide) Cream 0.025% —5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01% —15, 45 and 60 Gm. tubes and 120 Gm. jars. Ointment 0.025% —15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

fluocinolone acetonide — an original steroid from
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Synalar®
(fluocinolone acetonide)
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0.01%

An invisible topical





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Your Prescription Blank

Dear Lederle
Send me samples
of Peritinic

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(Mail to Department 150
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Pearl River, New York 10965)

* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic?)

PERITINIC®

Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:

● Elemental Iron (as Ferrous Fumarate)	100 mg
● Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
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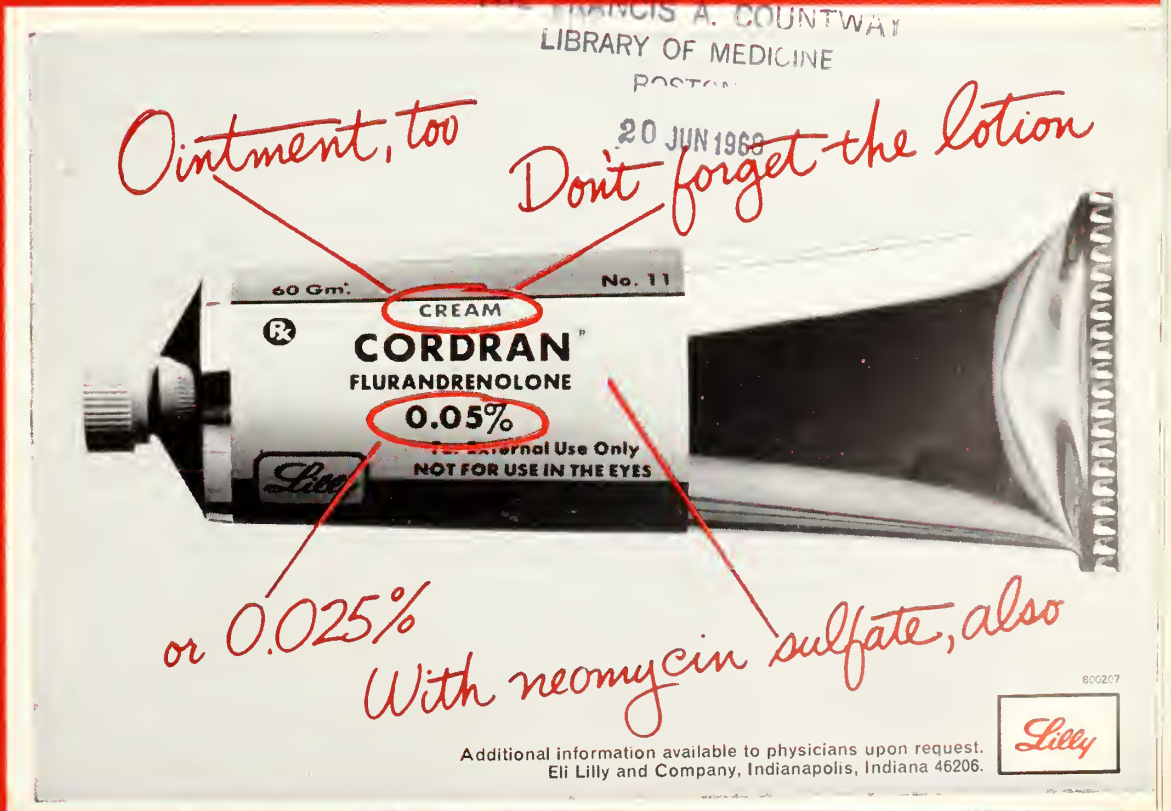
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The views expressed in this publication are those of the writers and do not necessarily reflect the opinions of the South Carolina Medical Association.

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Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

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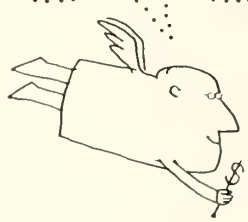
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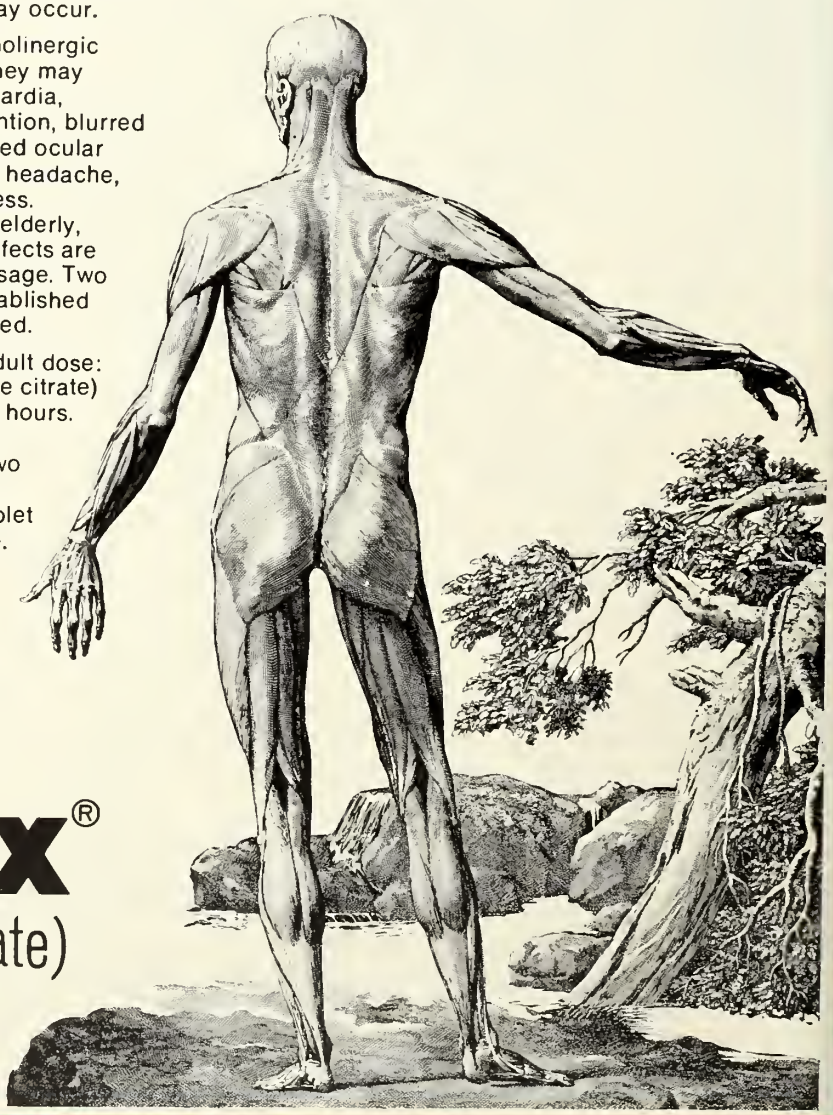
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Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

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Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug.

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Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic need sof each patient may be realized.
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To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



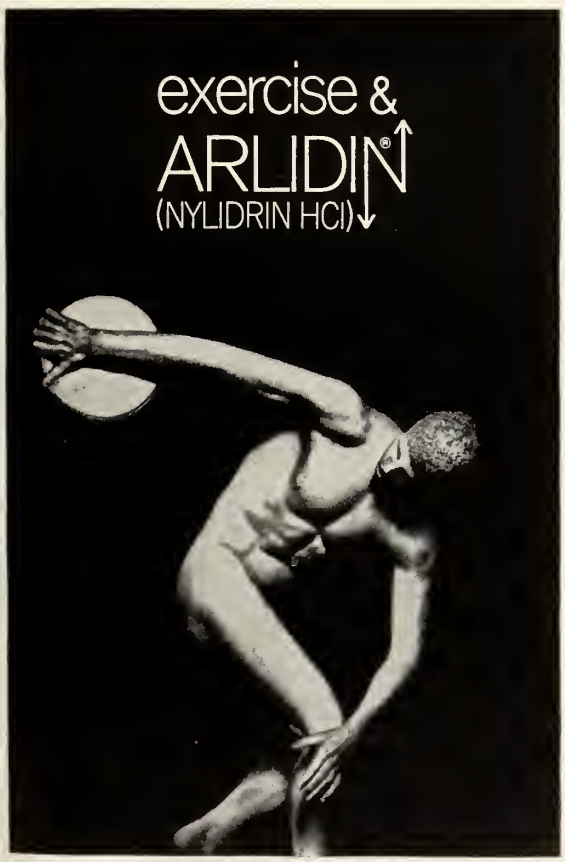
TUBERCULIN, TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

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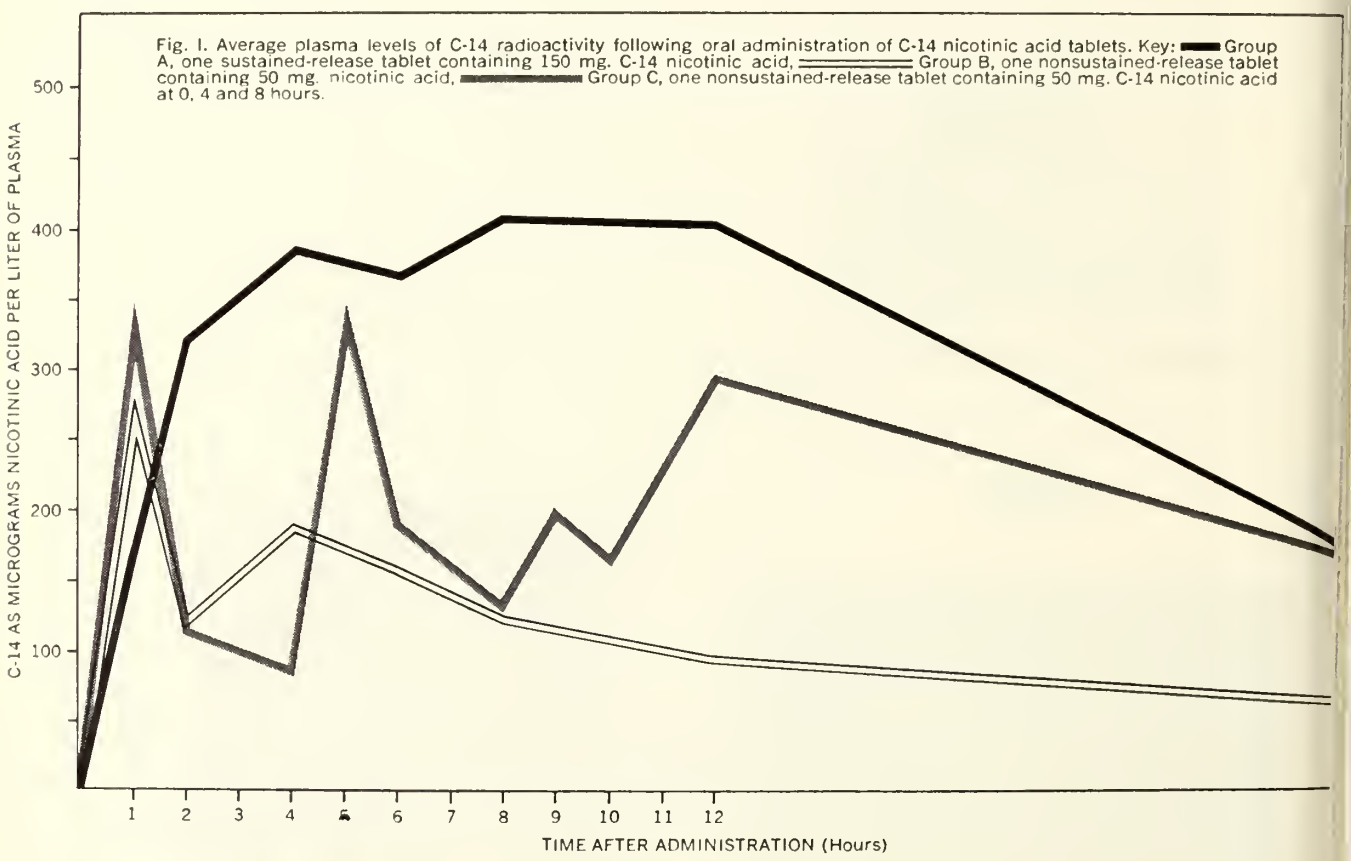
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Manufacturers of ethical pharmaceuticals since 1856

Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl.

Sustained circulatory, respirator
and cerebral stimulation for th





(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be co tinuous on a daily dose of only one Geroniazol TT ta let every 12 hours.

The gradual release of nicotinic acid in Geroniaz TT will provide the well-known peripheral vasodilat tion needed in patients with deficient circulation a with a minimum amount (if any) of "flushing." Al cerebrovascular circulation is complemented by pe tylenetetrazol, long-established as a cerebral and r piratory stimulant.

Geroniazol TT improves the typical, unfortuna signs of senile confusion. Patients become more ale

ged and debilitated

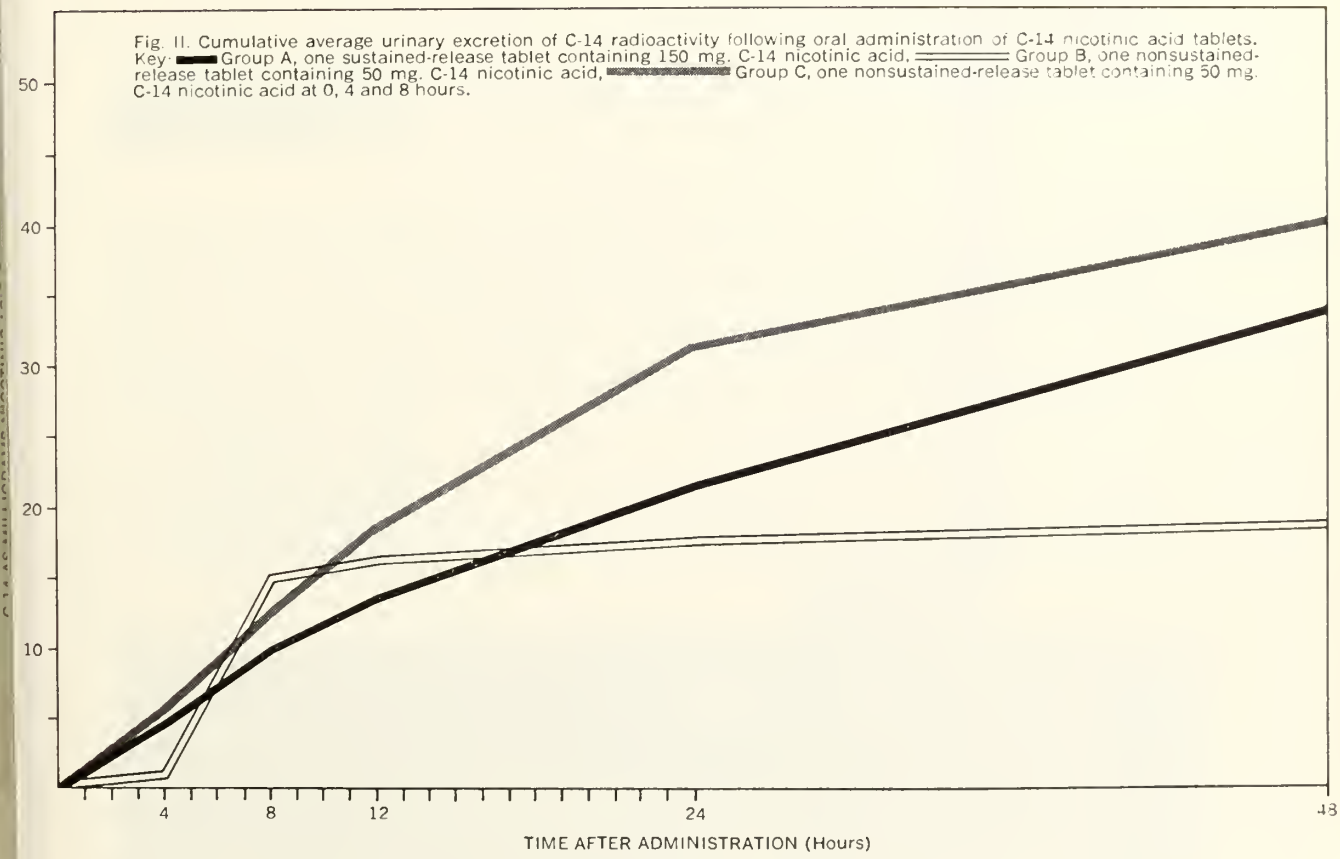


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

ss confused and moody. Personal care, memory, motional stability, social attention improve. Fatigue, athy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will rmit your patients to enjoy the benefits of time-olonged nicotinic acid/pentylenetetrazol therapy, an economical price. Dosage is only one tablet every hours.

ntraindications: There are no known contraindica-ns.

ecautions: Exercise caution when treating patients th a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

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PHILIPS ROXANE LABORATORIES
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Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet



Vacation trip....

Motion sickness?

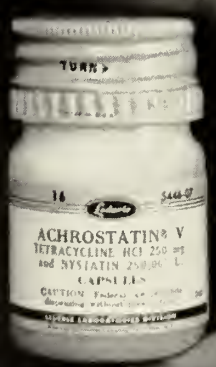


This time it'll be different. Emetrol taken before the trip begins will usually prevent nausea and vomiting. Emetrol is effective and safe...most helpful where safety is most important. It acts locally—not systemically.

Emetrol®
phosphorated carbohydrate solution
emesis control

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From the First Family of Tetracycline—
One of the 31 useful dosage forms in the ACHRO Family
ACHROSTATIN® V Capsules
Tetracycline HCl 250 mg /Nystatin 250,000 units



The lowest priced tetracycline-nystatin combination

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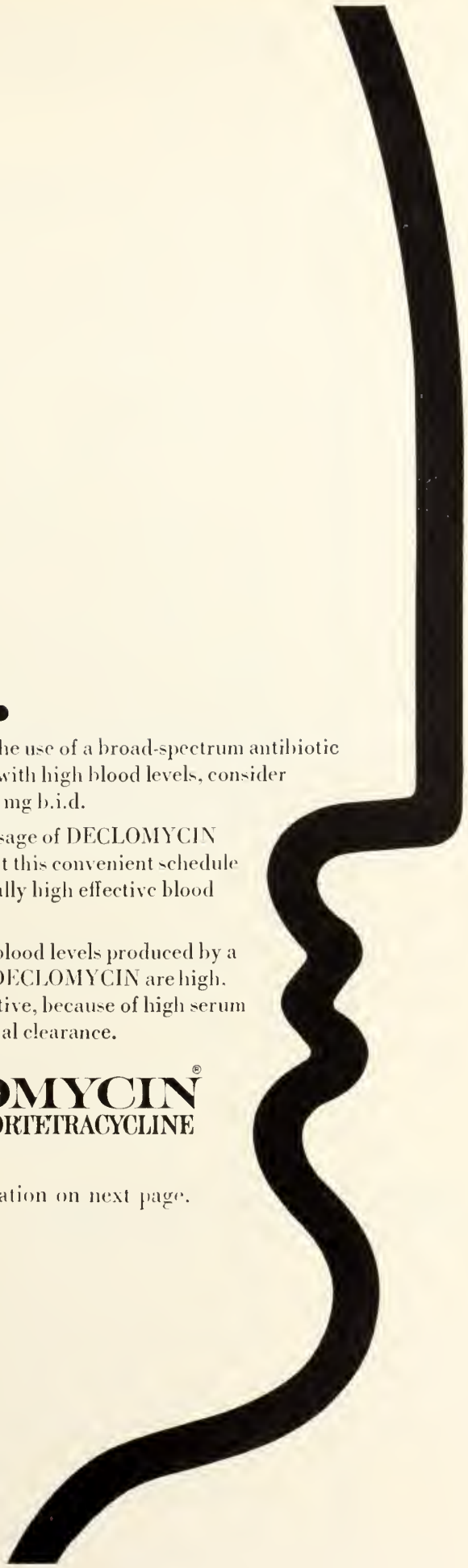
If your objective in the use of a broad-spectrum antibiotic is prolonged action, with high blood levels, consider DECLOMYCIN 300 mg b.i.d.

The maintenance dosage of DECLOMYCIN 300 mg can be kept at this convenient schedule because of its unusually high effective blood and tissue levels.

In clinical practice, blood levels produced by a therapeutic dose of DECLOMYCIN are high, prolonged, and effective, because of high serum binding and slow renal clearance.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
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Prescribing information on next page.



DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
b.i.d.

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg every 6 hours for a minimum of 4 doses or 300 mg every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg every 6 hours or 300 mg every 12 hours until a cure is effected.

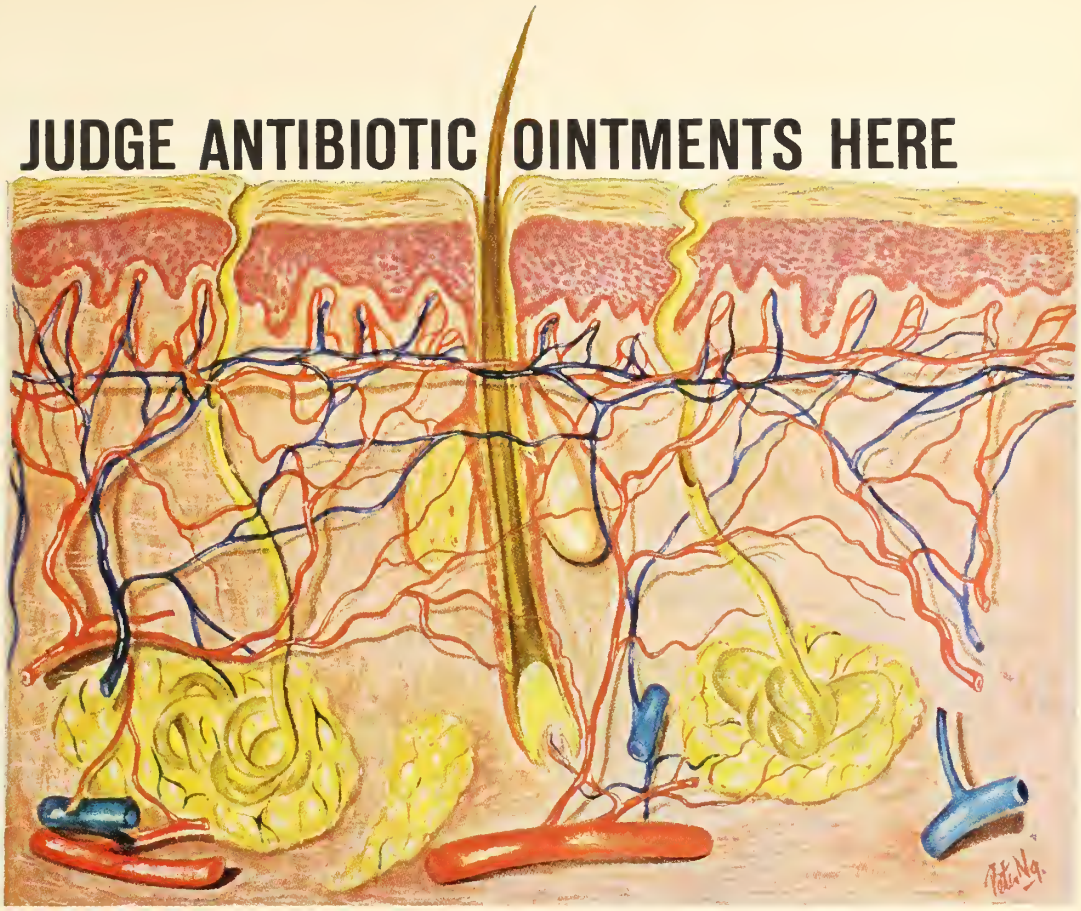
Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg in 3 divided doses for six days.

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Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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New

Therapeutic breakthrough in non-narcotic control of the pain of trigeminal neuralgia

Tegretol®
carbamazepine

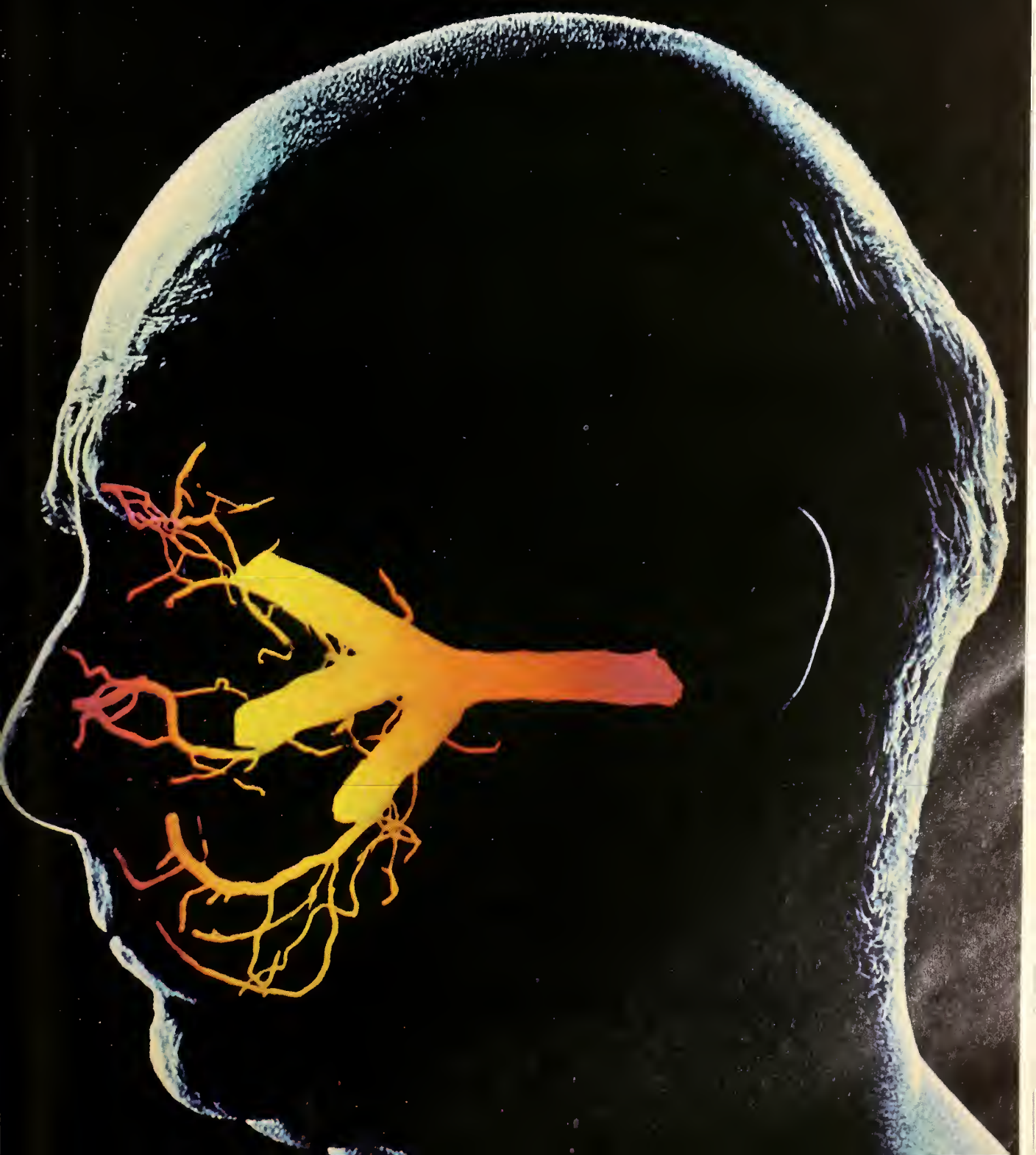
Warning
Fatal cases of aplastic anemia have been reported following treatment with Tegretol. Agranulocytosis, thrombocytopenia and transitory leukopenia have also been observed.
Complete blood and platelet counts should be done prior to and at regular intervals during treatment with the drug (see recommendations under "Important Note and Precautions") to help in the early detection of serious bone marrow injury. Abnormalities in initial blood tests should rule out use of the drug. Also, patients should be made aware of such early toxic signs of a potential hematologic problem as fever, sore throat, mouth ulcers, easy bruising and petechial or purpuric hemorrhage. Should such signs appear, the patient should be advised to discontinue the drug and to report to the physician immediately.

Indication Tegretol is indicated in the treatment of the pain associated with true trigeminal neuralgia. It is not a simple analgesic and should never be administered for relief of trivial facial aches or pains.
Contraindication Do not use in those with a known sensitivity to any tricyclic compound or in those being treated with M.A.O.I. agents. As long a period as possible should elapse before using Tegretol in patients who have been treated with M.A.O.I.'s, with a minimum of 7 days. In such cases, initial dosage should be low and the patient's reaction to gradual increments closely observed.
Important Note and Precautions Familiarity with the clinical symptoms which lead to an accurate diagnosis of true trigeminal neuralgia and with the complete prescribing information, careful patient selection, a thorough examination before treatment and close patient supervision throughout the treatment period are essential to the safe and effective use of this drug.
Where feasible, Tegretol should not be used in conjunction with any potent drug which may increase the possibility of toxic reactions.
In pregnancy, the drug should not be prescribed during the first trimester and thereafter only to patients in whom the clinical situation warrants the potential risk. It should not be administered to nursing mothers.
Patients with increased intraocular pressure should be closely observed during treatment with this drug because of its anticholinergic effect.
Because of the drug's relationship to other tricyclic compounds, the possibility of activation of latent psychosis and, in the elderly, of confusion or agitation, should be considered.
Dizziness and drowsiness may occur and patients should be cautioned about the hazards of operating machinery or automobiles and of engaging in other hazardous tasks.
Use cautiously in patients with a history of coronary artery disease, organic heart disease, congestive failure or liver disease.
Before initiating therapy, the following laboratory procedures should be performed:
1. Complete blood and platelet counts which, if abnormal, should rule out the use of the drug.
2. Baseline evaluations of liver function.
During treatment with Tegretol, the following laboratory procedures should be performed:
1. Complete blood and platelet counts should be done at intervals of one week during the first month of drug treatment, every two weeks during the second and third months, and at monthly intervals thereafter for as long as the patient is taking the drug. A trend toward a decreasing white blood cell count should suggest a dosage reduction and more frequent laboratory and clinical evaluations. Should this trend continue, the should be discontinued.
2. Liver function tests must be performed at regular intervals during ment with this drug since liver damage may occur during therapy. T drug should be discontinued immediately in cases of aggravated liv dysfunction or active liver disease.
3. Periodic eye examinations, including slit-lamp, funduscopy and to etry, are recommended for patients being treated with this drug sin many phenothiazines and related drugs have been shown to cause changes.
4. Complete urinalysis and BUN should be done on patients treate Tegretol because of observed renal dysfunction.
Adverse Reactions Dizziness, drowsiness, unsteadiness on the feet nausea, vomiting, aplastic anemia, transitory leukopenia, agranuloc eosinophilia, leukocytosis, thrombocytopenia, purpura, abnormalitie liver function tests, cholestatic and hepatocellular jaundice, urinary quency, acute urinary retention, oliguria with elevated blood pressu albuminuria, glycosuria, elevated BUN, microscopic deposits in the impotence, disturbances of coordination, confusion, headache, fatig blurred vision, transient diplopia and oculomotor disturbances, spe disturbances, abnormal involuntary movements, peripheral neuritis paresthesias, depression with agitation, talkativeness, nystagmus, ti nitus, paralysis and other symptoms of cerebral arterial insufficienc pruritic and erythematous rashes, urticaria, Stevens-Johnson syndr photosensitivity reactions, alterations in skin pigmentation, exfoliati dermatitis, alopecia, diaphoresis, recurrence of thrombophlebitis, e multiforme and nodosum, aggravation of disseminated lupus erythe tosus, gastric distress, abdominal pain, diarrhea, constipation, ano dryness of the mouth and pharynx, glossitis, stomatitis, fever, chills adenopathy, lymphadenopathy, aching joints and muscles, leg cram conjunctivitis, left ventricular failure, aggravation of hypertension, h tension, syncope and collapse, edema, aggravation of coronary arte disease and congestive heart failure. (Whether these cardiovascula are drug-related is not known. However, some of these complicatic resulted in fatalities.) The necessity for discontinuing the drug shou dictated by the gravity and severity of the adverse reactions.
Dosage and Administration The drug should always be taken with r if possible.
Initial: One-half tablet (100 mg.) b.i.d. on the first day. Thereafter, th should be increased in one-half tablet (100 mg.) increments every 1 until freedom from pain is achieved. To relieve pain, between 200 m 1200 mg. per 24 hours may be necessary.
Maintenance: Initial control of pain can be maintained in most patie with a dose of 400 mg. to 800 mg. daily. Maintenance doses may ra between 200 mg. and 1200 mg. daily.
At least once every 3 months during treatment period attempts sho made to discontinue the drug or to reduce the dose to the minimu effective level.
Availability Round, white, single-scored tablets of 200 mg. in bott of 100 and 1000. (B)46-8
For complete details, please see Prescribing Information.

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uncommon relief of uncommon pain



Grounds...for Regroton®

chlorthalidone 50 mg.
reserpine 0.25 mg.



when you want to provide the combined benefits of two accepted agents in the treatment of mild to moderate hypertension. (Contraindications: history of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.)

when you want to prescribe therapy that is generally well tolerated.
(However, adverse reactions may occur. For a complete listing, please refer to the full prescribing information which is summarized below.)

when your patient wants an easy-to-remember and reasonably priced regimen. (One tablet a day usually costs about a dime.)

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue 1 week before electroshock therapy, and if depression or peptic ulcer occurs. **Use in pregnancy:** Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn. **Precautions:** Antihypertensive therapy with Regroton should always be initiated cautiously in post-sympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. **For details, see complete Prescribing Information.** (B)46-600-B

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Regroton® **Geigy**

for the searing pain of "Shingles"...



PROTAMIDE®

(colloidal solution of denatured proteolytic enzyme)

Offers prompt pain relief

Relief of neuritic pain from *herpes zoster* (shingles) is prompt[1-3] usually after the first few intramuscular[2] injections—particularly when therapy is administered early.[3,4] The duration of disability in many patients is often significantly shortened.[2] Postherpetic neuralgias—even in the elderly—rarely develop.[1,4] Complete pain relief is observed in most patients within 5 days.[2]

Administration in *herpes zoster:* one ampul (1.3 cc.) I.M. daily for 2 to 5 days. Caution: For intramuscular use only. Inadvertent I.V. administration may cause anaphylactoid reaction. Supplied: Boxes of 10 ampuls, 1.3 cc. each.

Reference:

1. Combes, I. C. and Canizares, O. *New York State J. Med.* 52:706-708 (Mar. 15) 1952.
2. Xander, G. W., *Western Med.* 1:14 (Sept.) 1960.
3. Baker, A. G.: *Penna. Med. J.* 63:697-698 (May) 1960.
4. Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R. *Northwest Med.* 75:1249-1252 (Nov.) 1955.

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After the picnic even Gramps Was a victim of intestinal cramps

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa

In elderly patients it is particularly important to stop the diarrhea fast. Parepectolin helps you control diarrhea promptly and gain the patient's confidence until etiology has been determined.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.

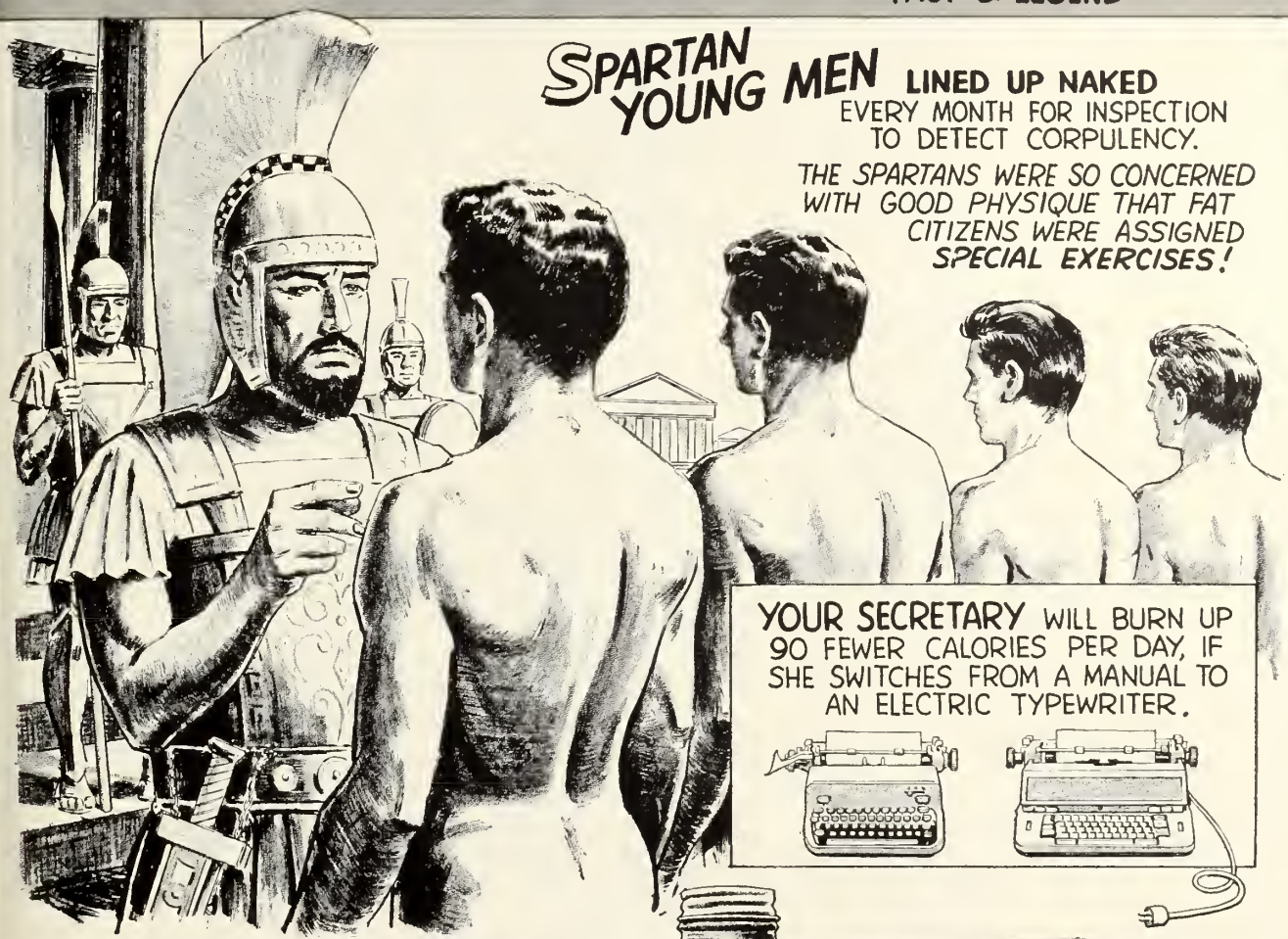
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Obesity Oddities

FACT & LEGEND



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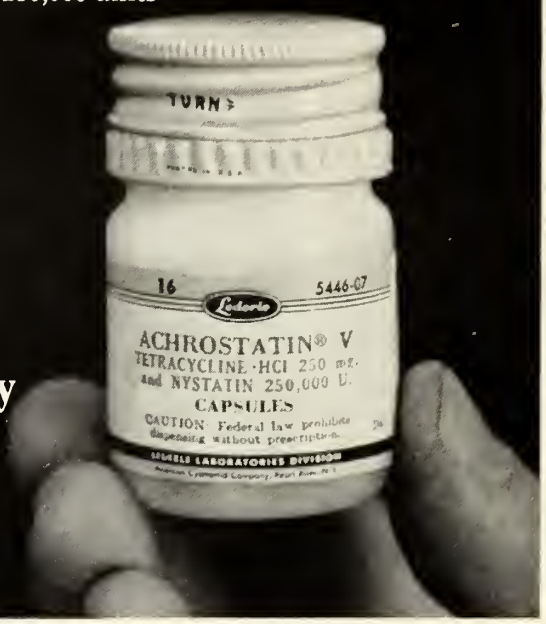
In pediatric bronchial asthma, the recommended maintenance dosage is 0.2 ml. per pound of body weight on arising, at 3 P.M., and on retiring. Adjust dosage to patient response. This average dosage provides continuous bronchodilation. Do not administer other xanthine preparations concurrently. May be contraindicated in peptic ulcer.

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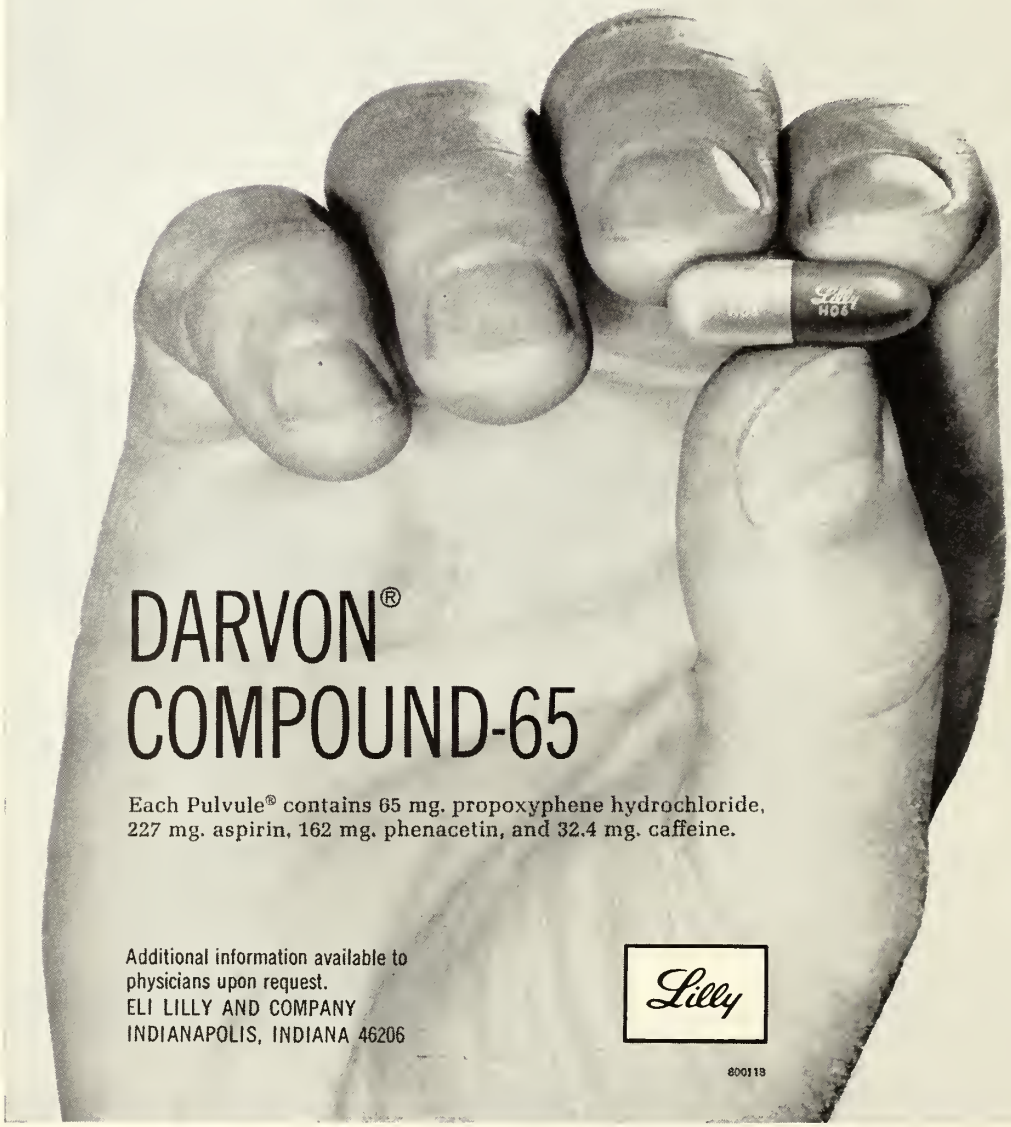
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South Carolina Medical Association

VOLUME 64 JUNE, 1968 NUMBER 6

PESTICIDE POISONING IN SOUTH CAROLINA

R. L. PIETSCH, M.D.**
J. F. FINKLEA, M.D.†
J. E. KEIL‡

Introduction

Many practicing physicians in South Carolina care for sporadic cases of pesticide poisoning, but few are aware that these cases constitute a significant mortality and morbidity problem. In the forthcoming summer there will be widespread use of many toxic chemicals on farms and orchards across the state and potentially fatal acute poisonings are inevitable. This report will depict the scope of the problem in South Carolina, and presents two interesting case histories which exemplify important aspects of common poisonings.

Materials

Poisoning reports and mortality records were obtained from the S. C. State Health Department (1957-66), from investigations by the U. S. Department of Agriculture (1963-66), and from the morbidity tabulations of the state's two Poison Control Centers in Columbia and Charleston. Hospital records were searched for illustrative cases. Quantities of pesticide usage and crop production were obtained from the community profile of the South Carolina Community Pesticide Study. Population characteristics were extracted from the 1960 census.

RESULTS AND DISCUSSION

Mortality

Mortality records for South Carolina from 1957 through 1966 revealed 38 deaths caused by pesticide poisoning. During the year 1964 when five pesticide deaths occurred in the state, South Carolina tied for the fourth largest number of such deaths in the nation behind Texas,

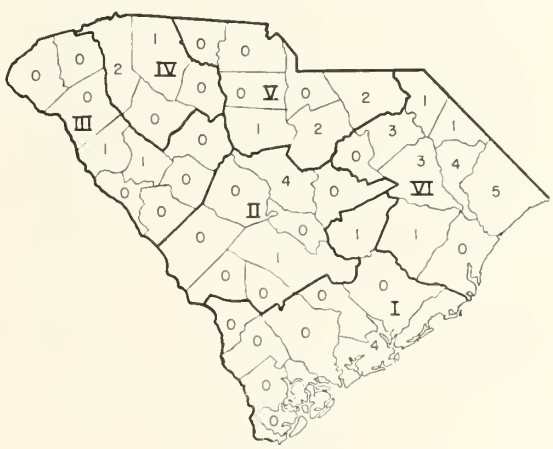


Fig. 1
South Carolina Pesticide Deaths 1957-66
Distributed by County and Congressional District

Florida, and Georgia.[1] If one compares South Carolina to the rest of the nation in 1964, the pesticide mortality rate here was four times greater than that for the nation as a whole.

The descriptive epidemiology of fatal pesticide poisonings i.e., residence, age,

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Table I

Cumulative Pesticide Mortality Rates Distributed by South Carolina Congressional District, 1957-66

District	Cumulative Mortality Rate Per 100,000 Population	Cumulative Mortality Rate Per 100,000 for Children Under 5 Yrs. of Age
I	1.2	13.4
II	0.9	6.8
III	0.6	9.0
IV	0.7	4.1
V	1.8	9.1
VI	4.6	35.1
All South Carolina	1.6	12.9

sex, and race, was examined. Figure 1 shows the state divided into the six congressional districts and their component counties. The arabic numerals show the number of pesticide deaths in each county during the 10 years studied. Most poisonings occurred in the Sixth Congressional District. Horry County in District VI had the most deaths (5) but 18 other counties also had fatalities.

Congressional districts and counties differ significantly in total population. Moreover, 60 per cent of fatal poisonings occurred in children under 5 years of age, the median age being only 2.5 years. Therefore cumulative pesticide mortality rates for the total population and for the population under 5 years of age were calculated for each congressional district as shown in Table I. The mortality rates for children under 5 years of age was eight times that of the total population. The mortality rate of the Sixth Congressional District is about three times greater than that of any other district. The mortality rate in children under 5 years of age in the Sixth District is likewise higher than that of any other district and three times that for the state as a whole.

Mortality by race and sex is presented in Table II. The 57 per cent of deaths which occur among non-whites may be compared to the percentage of non-whites in the state (34.9%) and also the percentage of non-whites in rural areas (39.3%). Whether total population or rural population is considered there is a significant increase in poisonings among non-whites as compared to whites.

There are several causes for the large number of pesticide deaths in South Carolina. The state's production of cotton and tobacco requires heavy, frequent applications of pesticides. The semi-tropical climate also permits growth of large populations of a wide variety of insects thereby requiring usage of many pesticides in the home and garden. The higher mortality rate of the Sixth Congressional District where there is intense cultivation of cotton and tobacco is certainly significant. Forested and industrialized areas of the state such as District III and IV have much lower mortality figures. The preponderance of pesticide deaths among children probably reflects poor safety standards used in application and storage of these potent chemicals.

Table II

Per Cent of Pesticide Deaths by Sex and Race 1957-66

Race	Males	Females	Total
White	27	16	43
Non-White	33	24	57
Total	60	40	100

Children tend to taste and play with anything within reach, and a soft drink bottle previously used for mixing insecticides is a frequent cause of death.

The cause of increased poisoning fatalities among non-whites is probably a reflection of the larger numbers of Negroes living on the farm and applying pesticides, although other socio-economic factors such as lack of safety awareness are undoubtedly contributory. Some difference in poisonings between the sexes can be expected both because of the small number of cases involved and because males apply these chemicals.

Morbidity

The morbidity data for three consecu-

Table III
Average Annual Pesticide Morbidity in South Carolina 1964-1966*

Type of Poisoning	Average Annual Cases for Total South Carolina Population		Average Annual Cases Under Five Years of Age	
	Number	Per cent	Number	Per cent
Insecticides	41.0	62.7	22.0	59.0
Rodenticides	18.0	27.5	11.0	29.5
Herbicides	1.0	1.5	0.7	1.9
Moth Balls	4.7	7.2	3.3	8.8
Fungicides	0.7	1.1	0.3	0.8
All Pesticides	65.4	100.0	37.3	100.0

*Aggregate of reports of poison control centers within South Carolina.

tive years was obtained from the Poison Control Centers and is summarized in Table III.

There are about 640 poisonings of all types reported in the state annually and pesticides account for about 10% of these. Like pesticide deaths, about three-fifths of pesticide poisonings occur in children under 5 years of age.

Insecticides account for more than 60 per cent of all pesticide poisonings. The organophosphate parathion, an extremely potent cholinesterase inhibitor, is the most common single offender. Arsenic, which is a component of many herbicides, is the only other pesticide approaching parathion as a cause of morbidity or mortality. Thus every physician should be familiar with the typical signs and symptoms of organophosphate and arsenic toxicity.

Case Studies

The following cases have been chosen to illustrate several points: 1) the frequent inadequate history of exposure to toxins; 2) the signs and symptoms of typical parathion poisoning; 3) the common dangerous practices used in pesticide application; and 4) the importance of prompt diagnosis and treatment. These cases recovered, but 38 others did not.

Case 1. An 11 month old Negro boy was brought to the Emergency Room at 5:30 A.M. stuporous, limp, and in acute respiratory distress. He had been normal the evening before and the mother knew of no recent head trauma, illnesses or poison ingestion.

Physical examination revealed normal vital signs except for tachycardia and tachypnea. There was no evidence of head injury or nuchal rigidity. Miotic pupils, excessive lacrimation and sialorhea were noted. Deep tendon reflexes were depressed symmetrically. Laboratory tests showed that red blood cell cholinesterase was depressed (4.4% of normal), while blood barbituate and salicylate levels were normal.

The child's recovery was prompt and uncomplicated because of good management. To remove poison in contact with the skin and eyes, the child was immediately scrubbed with soap and water, his fingernails were clipped, and his eyes were rinsed. Supportive therapy, tracheobronchial aspiration, atropine sulfate and 2 PAM were begun immediately. The child responded well and therapy was gradually tapered over the next 36 hours.

Further investigation by public health personnel revealed the family had formulated its own extremely potent insecticide by mixing concentrated Lindane and parathion with Black Flag. When sprayed for fleas, the family dog had died immediately. The father reluctantly admitted that he had stolen the chemicals while at work.

Case II. Four small children and one adult were admitted to a hospital with nausea, vomiting, and abdominal pains shortly after ingesting locally picked blackberries or a pie made from these berries. Laboratory tests revealed arsenic excretion as high as 995.3 micrograms per 24 hours in the adult and 639.2 micrograms per 24 hours in one of the four children. All patients recovered.

Investigation showed that a railroad company had contracted with a local firm to apply a herbicide to control brush and weeds along a spur line. The spray con-

tained arsenic trioxide, as did the blackberry pie.

Summary and Conclusions

In South Carolina, the use of pesticides is increasing each year and over 60 acute pesticide poisonings can be expected annually. During the 10 year study period from 1957-66, there were 38 deaths in the state. Most of these occurred in the area of highest pesticide usage, the cotton and tobacco counties of the Sixth Congressional District. Most pesticide deaths (61%) and poisonings (63%) occurred in children under 5 years of age. Parathion, a potent organophosphate cholinesterase inhibitor, was the most common offender, accounting for 34.2% of pesticide deaths but arsenic followed closely at 31.6%.

Safety education is the most important method of combating the problem. Industry must be responsible for safe production and distribution. Careful bold labeling of containers is mandatory. All materials must be safely stored. Each applicator of pesticides must be cognizant of potential lethal consequences of carelessness. Safe disposal of waste chemicals and containers both at the plant and by the consumer must not be neglected. Improper disposal can pollute streams and turn dumps, sheds, garages, and barns into dangerous booby traps for children.

Medical treatment of pesiticide poisonings must be prompt and vigorous. Accidental cases in adults tend to have evident causes while cases in children often have inadequate or negative histories. Every physician must therefore both be alert to the hazard and be familiar with the signs and symptoms of organophosphate and arsenic intoxication.

The South Carolina Pesticide Program now provides diagnostic services that were generally not available in the past. At the main office in Charleston,* facilities are available for rapid red blood cell and plasma cholinesterase determinations. At the laboratory in Columbia, pesticide metabolites in blood and urine can be determined. Current information regarding treatment of pesticide poisoning has been distributed to the state's two Poison Control Centers, and is also available at the Charleston office.

A safety educated public must be our first barrier against future pesticide poisonings; but should cases occur, only an alert and cooperative medical community can prevent avoidable deaths.

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*S. C. Community Pesticide Study, Research Building, Medical College of South Carolina, Charleston, S. C.: Telephone RA3-9411, Ext. 868 or 839.

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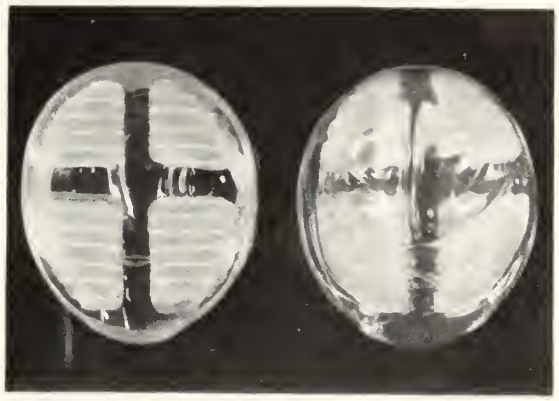
AUGMENTATION MAMMAPLASTY

CARTER P. MAGUIRE, M.D.
Charleston, S. C.

In addition to being an important functional organ, the female breast must be considered in the perspective of present day social consciousness as a structure of considerable psychologic significance. Since the era of classic Greek art, the female breast has been a symbol of femininity. Deformities of the size and shape of this structure assume importance above and beyond those of a functioning secondary sexual organ. To have physically acceptable breasts is a normal desire and the psychological implications of this desire must not be under-estimated.

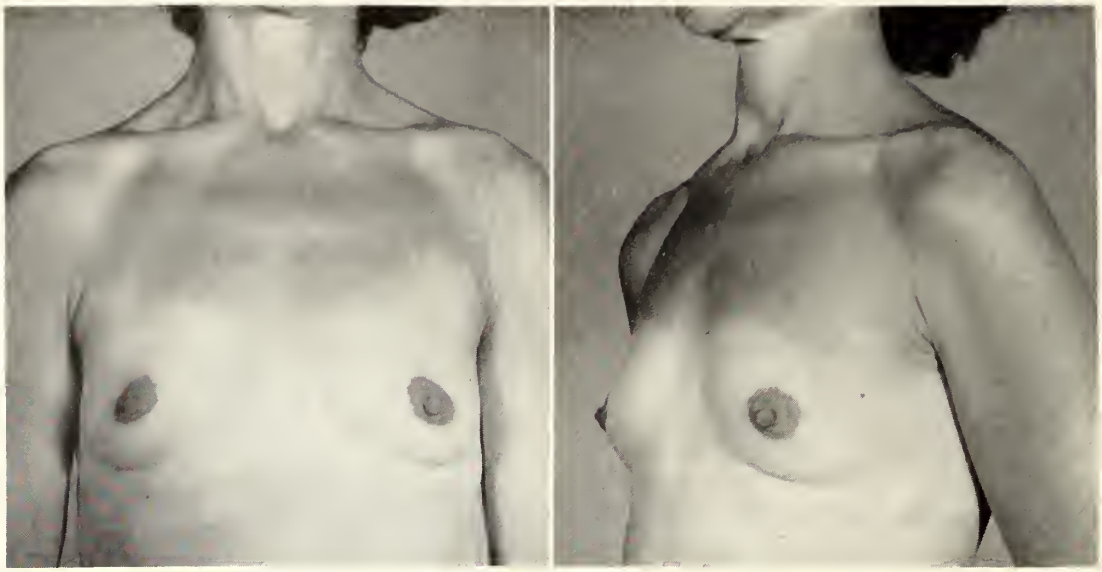
Reconstructive surgery involving the creation of a cosmetically acceptable breast was first documented in 1669, when Durstan developed the first deliberate attempt at a plastic breast operation[1] in which he performed essentially a mastectomy to correct prolapsed breasts. Plastic reconstructive procedures involving the breasts would include the mastopexy or so-called breast lift operation, the breast reduction mammaplasty for mammary hypertrophy, and the augmentation mammaplasty.

Interest first developed in the augmentation of the size of the female breast in the early 1950's, when Longacre[2] described techniques of enlarging underdeveloped female breasts by the use of local pedicle flaps. A second form of augmentation mammaplasty was described by Berson,[3] Bames,[4] and others as early as 1945, using free dermis-fat or fat-fascia grafts to supply the necessary bulk. The third type of breast augmentation involves the insertion of plastic prostheses to supply the needed bulk. The use of Ivalon sponge material, much like a bath sponge, was described first by Pangman and Wallace[5] in 1954, and since that time numerous refinements, both of the basic plastic material and the methods of insertion, have been described by Edgerton,[6] Conway,[7] Pickerell[8] and Cronin.[9] The original use of Ivalon, which seemed to be quite reactive to the tissues, was replaced by polyurethane sponge material, which is much less irritating, and accordingly produced fewer reactions and infection. The problem with the use of sponge was that the fibroblasts would grow into and invade the substance of the multiloculated spaces in the sponges and in time would cause shrinkage up to forty or fifty per cent of its bulk and result in a hard core underlying the mammary gland. Cronin[9] in 1963 described a subcutaneous prosthesis containing a gel form of dimethylpolysiloxane (Silicone) contained in a silastic envelope. This implant is by far the most popular implant in use today and results in a breast that feels, as some say, more like a breast than a normal mammary gland. (Fig. 1). It comes in small, medium, and large sizes.



(Fig. 1) Posterior and anterior view of Cronin prosthesis. Note flatness of posterior surface with four teflon mesh patches to stabilize implant to chest wall. Anterior surface (R) of implant is convex.

Before discussing the technique of implantation, a word should be said of the surgical anatomy of the breast. The breast



(Fig. 2) Preoperative photographs showing small size of breasts—(29", A padded cup), with minimal ptosis.

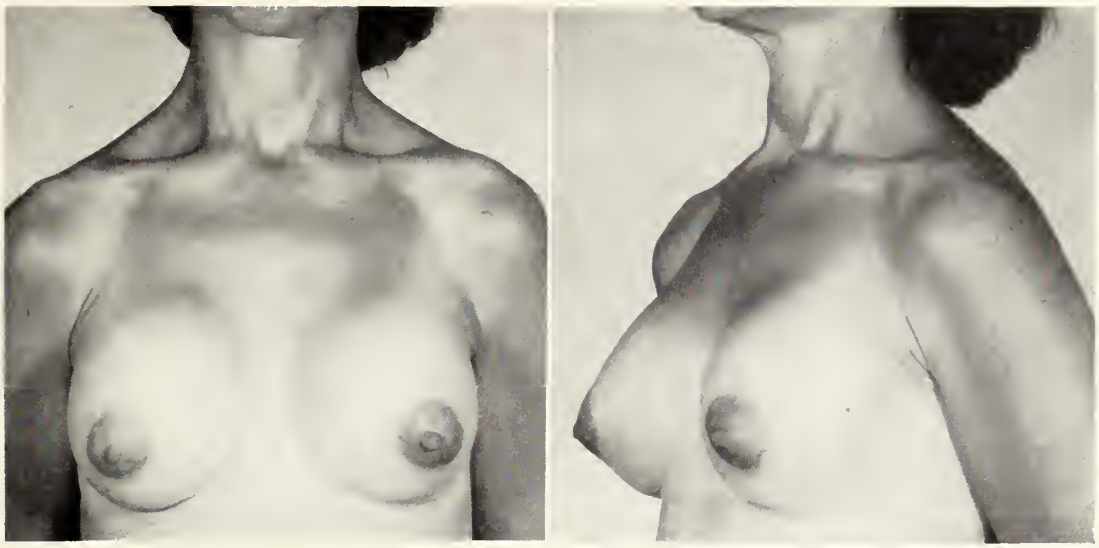
normally occupies an area extending from the second through the sixth ribs and from the sternum to the anterior axillary line, although the size and shape vary widely. The parenchyma of the gland is enveloped by a capsule or fascial layer that is continuous with the pectoral fascia. However, on the posterior surface of the mammary gland, the mammary fascia is separated from the fascia of the pectoralis major muscle by a layer of adipose tissue. At the time of implantation, it is this layer that is separated, forming a pocket into which the implant is placed. Thus the implant is placed under the mammary gland, not in it, and is separated from the mammary gland by a well formed layer of fascia.

Indications: Not being a psychologist or a psychiatrist, I would like to quote from Rees[10] of New York: "Indications for augmentation mammaplasty lie almost completely within the realm of psychologic need. Modern advertising methods, increased social consciousness of physical acceptability and current social attitudes of frankness toward sexual relationships have taken an emotional toll in the woman who believes herself to be inadequately equipped physically to meet the subtle but definite social standards identifying her sex. Flat chested women can become so emotionally handicapped that it is almost impossible for them to assume a normal role in courtship or marriage. Their natural reaction to men is subverted to one of timidity and defense. When women thus handicapped do marry there is a significant incidence of sexual frigidity, which may be traced to feelings of personal inadequacy." Dr. Rees goes on to say that the typical patient seeking augmentation mammaplasty is a married Protestant woman around the age of thirty and that they are active, competitive, on-the-go people, who are physically graceful, often pretty and socially at ease.

Small breasts are due to (1) primary aplasia or hypoplasia (2) surgery for benign or malignant disease (3) sudden weight reduction in a patient with breasts smaller than normal to begin with (4) and idiopathic involution usually following pregnancy.

Implantation of a prosthetic material is the procedure of choice today and it will be described briefly.

An incision is made along the outer



(Fig. 3) Postoperative photographs showing increased volume of breast— (32", C cup), and absence of visible scar.

edge of the lower outer quadrant of each breast at the point where the submammary fold lies. In the very small breasts it is necessary to extend this incision down on to the chest wall skin because the scar will be raised when the implant is placed. The incision is carried down to the pectoralis major fascia or if it is low enough, to the fascia of the rectus abdominis muscle. The plane lying between the anterior surface of the fascia of the pectoralis major muscle and the posterior surface of the fascia of the mammary gland is identified and much of the dissection can be done by finger stripping. A pocket is created extending up to a level of the second rib, and sometimes higher, almost to the midline of the sternum, and laterally enough to allow easy insertion of the implant. Care should be taken not to create a pocket that is too large, since it is the snug fit of the prosthesis that keeps it in place. Absolute hemostasis should be provided. A supportive bandage is kept in place for seven days, at which time it is removed, the sutures are removed, and a properly fitting brassiere is applied. The patient is instructed to keep arm raising activities to a minimum for a period of three weeks. She is urged to sleep in the guest bedroom until thirty days postoperative.

Typical Case History:

The patient is a 35 year old woman seen originally with the complaint of small breasts (Fig. 2). She is a very stylish and tasteful dresser and is generally an attractive woman. She complains of being unable to wear low cut evening and cocktail dresses and the presence of "falsies" in a bathing suit is always nerve-shattering. Her overall desire is to make herself more attractive to her husband.

An augmentation mammaplasty was performed at Roper Hospital, using the Cronin "natural-feel" implants. Postoperatively she had a smooth course without temperature elevation. She was discharged on the fourth postoperative day. The sutures were removed in the office on the seventh postoperative day, and at that time healing of the skin wounds was complete. She was last seen six months following surgery and since there were no problems, she was discharged "thrilled with the result". (Fig. 3).

Another thirty year old woman wrote three years following augmentation mam-

maplasty: "There has been no discomfort. In fact, I am not even aware that they are not a part of me. In a nut shell, I couldn't be more pleased."

Summary

A brief history of augmentation mammaplasty is presented, giving indications and techniques used. A typical case report is presented.

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TRANSURETERO-URETEROSTOMY — Fletcher C. Derrick, Jr., M.D., Kenneth M. Lynch, Jr., M.D., Raymond Price, Jr., M.D., William R. Turner, Jr., M.D., (Charleston) JAMA 200:987-990 (June 12, 1967)

Injury to the distal third of the ureter is not uncommon. This type of injury frequently occurs during surgery to pelvic organs and of course if recognition occurs at the time of injury, primary repair usually can be done with good results. The late complications of ureteral stricture, ureterovaginal fistula or ureteral necrosis and the leakage of urine either into the retroperitoneal or peritoneal spaces present more difficult problems. Frequently, the distal ureteral injury, when recognized late, does not lend itself to any form of primary repair or ureteroneocystostomy. When this situation develops, one must either devise a bladder flap, remove the kidney, or interpose an isolated ileal segment between the ureter and the bladder.

Anastomosing an injured ureter to its opposite fellow by way of a transperitoneal, retroperitoneal, crossed uretero-ureterostomy was mentioned in experimental work as early as 1900. In 1935 it was accomplished in the human; however, it was only recently that it met with any surgical success and use in regular management of the problem.

Four patients were managed by transureteroureterostomy at the Medical College of South Carolina and all met with excellent surgical results. The operation is accomplished through a transperitoneal approach opening the retroperitoneal membrane and through a tunnel dissected caudal to the inferior mesenteric artery. The ureter to be anastomosed to its fellow is brought and anastomosed with 5-0 chromic catgut. We have not used any ureteral splinting catheters routinely. We have used a Penrose drain in the retroperitoneal space and this is brought through a bluntly constructed tunnel in the wall of the abdomen.

SPARGANOSIS IN SOUTH CAROLINA

EUGENE C. COX, M.D.

Human sparganosis, the extra-intestinal infection caused by a larval form of *Diphyllobothrium* tapeworm, is apparently an unusual disease in the United States. Approximately forty-three instances of this infection are known to have occurred in this country.[1-6] Most of these have been residents of the Southern states. As far as is known, South Carolina has never had a reported case. It is the purpose of this paper to report a case of sparganosis occurring in a resident of this state.

Case Report

The patient, an adult white male, was a farmer and a life-long resident of Coastal South Carolina. Approximately three months before consulting a physician, the patient noted a painless nodule of his right leg. During this period the lesion was said to have increased rapidly in size. The skin over the involved area was described as having a gray appearance and the underlying tissues were firm and nodular. His physician thought the lesion might be an inclusion cyst. The nodule was surgically excised.

Pathology

Gross examination: The surgical specimen was 2.4 x 1.3 x 1.6 cm and consisted of a segment of skin with attached fat. The dermis and subcutaneum were quite firm.

Microscopic examination: The epidermis was unremarkable. In the superficial dermis there was a perivascular infiltrate consisting of polymorphonuclear cells, plasma cells, and lymphocytes. In the deep dermis and extending into the superficial subcutaneum, there was a single, slightly folded flatworm larval form (Fig. 1). It had a moderately thick, deeply eosinophilic cuticle supported by a single layer of cuboidal cells with dark round nuclei and scant cytoplasm. The parenchyma of the larval body consisted of a very loose tissue containing frequent round, concentrically laminated basophilic structures. The tissues about the organism were heavily infiltrated with plasma cells, lymphocytes and eosinophils. Also there were fairly numerous aggregates of multinucleated giant cells (Fig. 2).

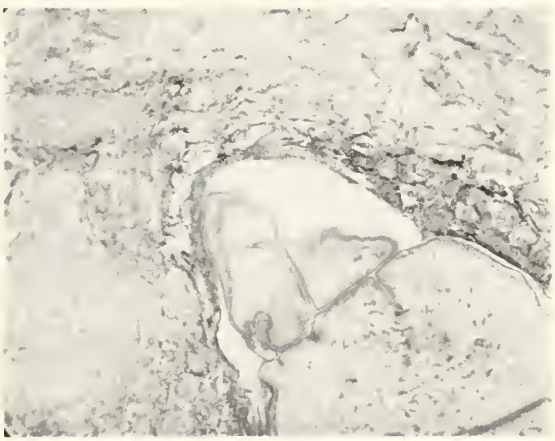


Figure 1. A portion of larva is seen in the dermis where it is surrounded by inflammatory cells. x 40.

Discussion

The parasite found in the tissues of this patient was felt to be a plerocercoid larva of a tapeworm (*Diphyllobothrium mansonoides*) whose more common definitive hosts are the dog, domestic cat, and the bobcat. In the usual life cycle, eggs passed from the digestive tract of the definitive hosts develop in water into a free-swimming miracidium. This is ingested by a small crustacean (cyclops) and develops into a procercoid larva. When the cyclops is eaten by intermediate hosts (frogs, rats or water snakes) the procercoid larva develops into the plerocercoid form. If the infected frog, rat, or snake is eaten by one of the definitive hosts, the plerocercoid larva develops into

From the Pathology Department, Greenville General Hospital, Greenville, South Carolina 29601.

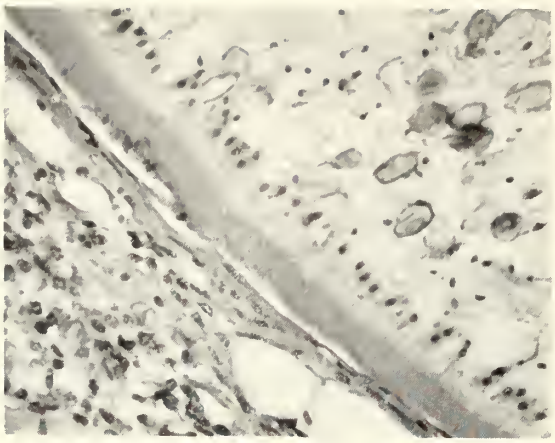


Figure 2. The wall of the sparganum shows a thick cuticle on the exterior with numerous calcareous bodies in the central portion. x 400.

an adult tapeworm and resides in the gastrointestinal tract. It is thought that most forms of human infection result from the ingestion of a cyclops[2] containing the procercoid larva which changes into the plerocercoid form and migrates to the extra-intestinal tissues, usually the skin, extra-intestinal tissues, usually the skin, subcutaneum or muscle, producing human sparganosis. The organisms elicit a florid inflammatory response in the host's tissues. This larve (sparganum) is an elongated, ribbon-like worm several centimeters in length and a millimeter or more wide. It is structurally undifferentiated except for a rudimentary scolex.[4]

Human sparganosis was first recognized by Patrick Manson[2] in 1882 when he reported involvement of the abdominal and pleural cavities in a native of Amoy, China. After this initial report there have been quite a number of cases reported from the Far East. The first case in the United States was recorded in Florida in 1908.[3]

As far as is known a presurgical diagnosis of this condition has never been made.[4] Probably one of the greatest drawbacks to a clinical diagnosis is the lack of knowledge of the existence of this disease by many physicians. Except for the most singular characteristic of movement or migration of the nodule that has been noted in some cases, there are no truly distinguishing features of the presenting lesion.[4] Surgical excision is the most common form of therapy. This is usually curative and of course provides a specimen from which the diagnosis can be made. Ethyl alcohol injection has been tried in some intraocular cases. Also novarsenobenzol intravenously every four to five days for two to six doses has been used with some success in ocular infections.[2] Mueller[3] reports that he has an antigen available for skin testing.[3] An unequivocal diagnosis can be made only by feeding the larva obtained from the surgical specimen to an appropriate animal and subsequently examining the morphologic characteristics of the adult worm.[3] However this ideal is rarely achieved. This was not possible in the case reported here since the surgical material was received in formalin and the larva was dead. However, the microscopic findings are identical to those cases that have been generally accepted as being due to *Diphyllobothrium mansonoides*.[5]

It is not anticipated that this disease will ever become a serious public health menance. However, it is an intriguing infection and the occurence of sporadic cases particularly in the South and its occasional appearance in other parts of the United States make knowledge of its existence and characteristics important.

Summary

A case of sparganosis occuring in a life-long native of South Carolina is reported. This is thought to be the first case reported from this state though cases have been reported in virtually all the other Southern states. Generally man becomes involved by drinking water containing infected copepods. The condition is usually diagnosed by gross and microscopic examination of the tissue removed by surgical excision. Surgical excision of the lesion is the usual form of treatment and this is generally curative.

Acknowledgment

The author gratefully acknowledges the help of R. E. Quinn, M.D. for supplying the surgical specimen and clinical information in this case.

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Treatment of Acute Massive Pulmonary Embolism: Medical or Surgical—R. D. Sauter, D. A. Emanuel, and E. J. Wenzel. Ann Thor Surg 4:95-105 (Aug) 1967.

It is generally agreed among surgeons that the indication for pulmonary embolectomy is sustained hypotension in a patient with massive pulmonary embolus. The surgical mortality under these circumstances is between 60% and 70%. Other methods for the treatment of these patients should be explored. Three patients who fulfilled the above criteria were treated with urokinase, which is an enzymatic fibrinolytic activator. All these patients suffered acute massive pulmonary embolism and would have been considered candidates for pulmonary embolectomy; all survived and their clinical results were good. Because of the poor results with embolectomy, particularly in patients over 65, the authors suggest that these patients be treated with urokinase, even though partial cardiopulmonary bypass may be necessary for temporary support. In the younger age-group urokinase is suggested as the principal form of therapy unless the patient's condition deteriorates, at which time pulmonary embolectomy could be performed. Spontaneous resolution of acute pulmonary emboli has been well documented. While this complicates somewhat the evaluation of results of fibrinolytic therapy, in the authors' opinion urokinase greatly hastens the lytic process.

Functional Evaluation of Esophageal Replacement in Children—B. Othersen, J Thor Card Surg 53:55-63 (Jan) 1967.

There is widespread agreement that the colon appears to be the substitute of choice when replacing the esophagus. However, there is controversy as to whether the segment should be right, transverse or left, iso- or antiperistaltic, retrosternal or intrapleural.

Eleven children, with esophageal replacement by various techniques, were studied carefully by history and cinefluoroscopy. The following conclusions and recommendations were made:

1. There is no discernible difference in function between right or left colonic segments or between iso- and antiperistaltic arrangements.
2. Colonic interposition between cervical esophagus and stomach is best performed in a single procedure. The colonic segment should be placed without kinking or redundance—it will grow with the child.
3. Infants with a cervical esophagostomy should be fed by mouth when gastrostomy feedings are given, so that they learn to eat.
4. Esophageal replacement should be delayed until the child is ambulatory (18-24 months). The erect position after meals aids in the drainage of the interposed segment.
5. Gravity, not peristalsis, governs the flow of food through the interposed colon, which acts not as an esophageal substitute but as a conduit only.

ERRATUM

In the article by Grady Hendrix, M.D. on Coronary Arteriography in the April number of the Journal, the legends for the cuts on page 118 and 119 are reversed as the result of a printers error.

DEMOGRAPHY OF THE CLASS OF 1967-68

THE MEDICAL COLLEGE OF SOUTH CAROLINA—SCHOOL OF MEDICINE

CAROLINE B. LOWN, B.S.*
LOUIS P. JERVEY, M.D.**

Eighty-two freshmen began their studies in the School of Medicine of the Medical College of South Carolina on September 7, 1967. A like number will be chosen for the class of 1968-69. The freshman class size will increase to 102 beginning in September 1969.

Realizing the interest of the medical community, and particularly the alumni, in the affairs of the School of Medicine, information concerning the freshman class was published last year for the first time (J S Carolina Med Ass 62:445, 1966). Since the initial effort received considerable attention, the following pertinent information on the 1967-1968 freshman class is presented herewith.

Composition of the Total Applicant Pool (Past 7 yrs.)

	In-State		Out-of-State		
	Men	Women	Men	Women	Total
1961-62	153	9	0*	0*	162
1962-63	173	7	0*	0*	180
1963-64	184	10	0*	0*	194
1964-65	184	13	83	6	286
1965-66	199	12	131	10	352
1966-67	193	10	176	10	389
1967-68	198	8	163	11	380

*Out-Of-State applications were not accepted for processing until 1964-65.

cine, The Medical College of South Carolina.

The total number of applications processed was approximately the same as that for the preceding year.

By interesting coincidence the distribution of students by sex and geographic source is the same as for the class of 1966-67. Male applicants continue to greatly outnumber female applicants. Out-of-state students are required to have somewhat higher academic qualifications than in-state students before consideration. At the time of acceptance of the class of 1965-66, only one publicly or privately owned medical school in this country failed to admit any out-of-state residents to its first year class. (Education Number, JAMA 198: 865, Nov. 1966).

Composition of the Accepted Classes (Past 7 yrs.)

	In-State		Out-of-State		
	Men	Women	Men	Women	Total
1961-62	77	3	—	—	80
1962-63	77	3	—	—	80
1963-64	76	4	—	—	80
1964-65	75	2	4	1	82
1965-66	75	2	5	0	82
1966-67	72	3	7	0	82
1967-68	72	3	7	0	82

The following figures apply specifically to the present freshman class (1967-68):

Geographical Distribution of the Total Applicant Pool:

There were applicants from 23 states, the District of Columbia and Puerto Rico as well as 5 applicants from 5 foreign countries. States with the largest representation were:

South Carolina	206
North Carolina	34
New York	24
Florida	20
Georgia	19
Pennsylvania	16
New Jersey	10

Other states represented were: Alabama (5), Connecticut (5) Maryland (5), Virginia (5), California (3) Delaware (3), Illinois (3) Michigan (2), Minnesota (2), Ohio (2). Tennessee (2), Texas (2), Wisconsin (2), District of Columbia (1), Kentucky (1), Massachusetts (1), West Virginia (1), and Puerto Rico (1), Canada (1), China (1), Hong Kong (1), Japan (1), and Jordan (1).

*Assistant Registrar.

**Associate Dean, Associate Professor of Medicine, The Medical College of South Carolina.

Geographical Distribution by South Carolina County of the Total Applicant Pool.

Of the 46 counties in South Carolina, 38 were represented as follows:

Richland	23	Abbeville	4	Chesterfield	2
Spartanburg	21	Fairfield	4	Georgetown	2
Greenville	19	Kershaw	4	Greenwood	2
Charleston	14	Sumter	4	Hampton	2
Florence	10	Williamsburg	4	Lancaster	2
York	10	Beaufort	4	Lee	2
Orangeburg	8	Cherokee	3	Pickens	2
Aiken	7	Clarendon	3	Union	2
Darlington	7	Colleton	3	Allendale	1
Anderson	6	Horry	3	Dillon	1
Laurens	6	Marion	3	Dorchester	1
Newberry	6	Oconee	3	Jasper	1
Lexington	5	Barnwell	2		

Geographical Distribution of the Accepted Class.

In the present freshman class there are students from 5 states. A majority of the accepted applicants are from the State of South Carolina and their counties of origin are shown below:

South Carolina 75

Spartanburg	9	Colleton	2	Cherokee	1
Charleston	7	Clarendon	2	Horry	1
Greenville	6	Kershaw	2	Georgetown	1
Richland	5	Orangeburg	2	Greenwood	1
Florence	5	Hampton	2	Lancaster	1
York	6	Marion	2	Laurens	1
Darlington	4	Anderson	1	Newberry	1
Sumter	3	Allendale	1	Oconee	1
Aiken	2	Barnwell	1	Pickens	1
Abbeville	2	Beaufort	1	Union	1

Out-of-state students show the following distribution:

Florida	2
North Carolina	2
New York	2
New Jersey	1

Again this year, larger counties provided the greatest number of applicants for consideration. Distribution by county is even more general than with last year's class (24 counties represented 1966-67, 30 counties represented 1967-68).

College Distribution, Total Applicant Pool.

Students applied from 112 colleges. The 11 institutions from which the largest number of applications were received are as follows:

University of South Carolina	57
Clemson University	30
Wofford College	24
University of North Carolina	20
Furman University	15
The Citadel	14
The College of Charleston	13
University of Georgia	10
Davidson College	9
Emory University	9
Wake Forest	9

College Distribution—Accepted Class

University of South Carolina	28
Clemson University	10
Wofford College	8
Furman University	6
College of Charleston	7
University of North Carolina	6
The Citadel	4
Davidson College	2
Medical College of South Carolina Pharmacy	1
Winthrop College	1
Emory University	1
Florida State	1
Mercer University	1
University of Georgia	1
George Washington University	1
University of the South	1
Valdosta State	1
Wake Forest	1
Washington & Lee University	1
	82

By comparing the college distribution of the total applicant pool with that of the accepted class an impression can be gained about the percentage of students accepted by institution. It must be remembered, however, that some students who are accepted decline the offer or withdraw their acceptance to attend other schools and are thus not represented in the "Accepted Class" table. During the selection of this class, for example, there were 18 South Carolina applicants accepted by the Medical College of South Carolina who elected to attend out-of-state schools.

The wide diversity of family background of these students is apparent. This data would seem to refute adequately the oft-repeated rumor that only doctors' sons get into medical college.

Occupations of Parents of Accepted Freshmen:

Sales & Clerical Workers	22
Business Executives or Operators of small Businesses	12
Government Services	9
Physicians	8
Laborers	6
Health Professions	6
Farmers	3
Skilled Trade Workers	3
Lawyers	3
Engineers	3
Homemakers	3
Ministers	2
Teachers	2
	82

Performance on each of the four parts of the Medical College Admission Test is recorded in the following table:

Medical College Admission Test (Accepted Class 1967-1968)

	Mean	Standard Deviation	Median
Verbal	489	86	505
Quantitative	530	76	535
General Information	528	76	535
Science	519	75	515

These scores compare favorably with those of last year's freshman class showing minor variation in each category.

The admissions process is a careful and deliberate attempt to select qualified students who have the greatest potential for completing satisfactorily a medical education. Attrition figures are therefore of interest as one means of evaluating the adequacy of the selection process. The following table shows attrition from all causes in the past 12 graduating classes:

Failure to graduate in 4 years due to academic failure means loss of potential physicians. However, the above figures include individuals who dropped out of the regular program to pursue a year of research, individuals required to repeat a year for academic reasons, etc., and do not necessarily represent loss of medical manpower. Averaging the figures over the 12 year period tends to minimize these distortions. Attrition rate is in keeping with published figures of the Association of American Medical Colleges which indicate that "about 85-90% of those entering medical school in the first year will gain the MD degree four years later." (JAMA Education Number 202:756, 1967).

Entering Year	1st Year Students	Graduates 4 years later
1952	79 (80 accepted but one failed to appear)	67
1953	80	74
1954	79 (80 accepted but one failed to appear)	74
1955	80	74
1956	80	70
1957	80	75
1958	80	71
1959	80	70
1960	80	74
1961	80	80
1962	80	68
1963	80	81
	958 (100%)	878 (91.65%)

Number not graduating in 4 years 80 (8.35%)

One hundred and seventy-five (175) interviews were conducted by members of the Admissions Committee. Generally, applicants were interviewed by only one member of the Committee and applicants who reapplied were not given a second interview unless important changes necessitated reevaluation.

Seven students entered after 3 years of college without degrees, and 3 after 4 years of college with no degree. Three students entered with master's degrees while the remainder completed 4 or more years of college and received a degree.

While the Admissions Committee is pleased with the composition of the class as characterized by these descriptive figures, it recognizes that even more important characteristics must be considered which do not lend themselves to such tabulation. Character, leadership, integrity, motivation and dedication are all important considerations which are reviewed by the members of the Committee

in a variety of ways. It is felt that the class of 1967-1968 is well qualified academically for the study of medicine, and personally for the assumption of the physician's role in tomorrow's medical practice.

MEDICAL COLLEGE CLINIC

DERMATOLOGICAL DON'T'S

KATHLEEN RILEY, M.D.
Department of Dermatology

CASE 11—Biologic False Positive Serum Test—Revised (1968)

White, Male, Age—30

History

On routine general check-up a white male, age 30, was found to have a routine VDRL positive in the dilution of 1:2.

There was no history of previous serum tests. He claimed no contacts except with his wife.

There had not been any skin eruptions or genital sores.

During the last several months there was no history of any type of immunization or injections.

There was no history of recent respiratory infection, tuberculosis, lupus erythematosus, arthritis, fever or illnesses of any kind.

Physical Examination

Physical examination was entirely normal with no cutaneous or mucous membrane lesions present.

Diagnosis

One positive serum test—possible Biologic False Positive.

TREATMENT

DON'T'S

1. DON'T make a diagnosis of syphilis on the basis of one positive test, especially if it is of a low titre. Always repeat test.

2. DON'T treat with penicillin on the basis of one positive test of low titre.

3. DON'T alarm the patient and insist that this is most likely syphilis. Let him know that there is a possibility that this is a false positive and explain the meaning to the patient.

4. DON'T fail to pursue further for a more definitely diagnosis.

5. DON'T forget to do VDRL on his wife.

DO

1. DO repeat routine titred VDRL and FTA (Fluorescent Treponema Antibody Test—Absorption type)*

2. DO treat syphilis if both are positive, as the diagnosis of syphilis is justified.

3. DO further evaluation with lumbar puncture and treat as indicated.

4. DO make a diagnosis of biologic false positive if the FTA Absorption Test is negative even if VDRL is still positive.

*An absorption technique designed to remove nonspecific treponemal antibodies from human serums has resulted in an improved FTA test designated as FTA absorption test. This new test procedure gives greater sensitivity in the serologic diagnosis of syphilis than any recommended treponemal or nontreponemal test at this time. Its specificity in evaluations to date appears comparable to that of the TPI test. It is a much simplier, more practical test than the TPI. This procedure was developed at the Venereal Disease Research Laboratory.

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X-RAY FILM OF THE MONTH

S. E. PUCKETTE, JR., M.D.
Medical College Hospital
Charleston, S. C.



This spot film of the bladder was taken during a IVP done as a part of a hypertensive workup on a 52 year old white male. The patient had no urinary tract symptoms, a normal urinalysis, and a subsequent diagnosis of essential hypertension was made.

This is a case of bilateral simple ureteroceles. They are produced by cystic dilatation of the intravesical submucosal segment of the ureter, which balloons into the bladder lumen. Stenosis of the ureteral orifice with perhaps weakness at the ureterovesical junction is thought to be the underlying cause. In general they are asymptomatic but urinary stasis and infection may result. Stones may form or become lodged within the caivty of the ureterocele.

Simple ureteroceles occur with equal frequency in both sexes and on both sides of the body. Commonly, they are bilateral as seen here. Complete upper track duplication on the affected side may be present, and under these circumstances, almost invariably it is the upper drainage system which has the ureterocele.

In addition to this group of simple ureteroceles usually found in adults, there is an ectopic group usually found in childhood, usually in females. Here the ureter terminates ectopically in the urethra and thus produces a much more serious and complex urological problem. This ectopic group is probably always congenital, whereas the simple group may be congenital or acquired.

On an excretory urogram, one sees the "cobra head" or "spring onion" effect due to the contrast media collecting within the cavity of the ureterocele. Around this is a thin halo representing the non-opaque wall of the lesion. On retrograde cystography one usually sees a round or oval radiolucent filling defect in the posterior aspect of the bladder.

The treatment of simple ureteroceles will depend on the degree of obstruction and dilatation of the ureter and upper collecting tracts. It will vary from one to another of several procedures which relieve the obstructive factor.

President's Page



In his report to the AMA House of Delegates in Atlantic City in June 1967 Dr. Wesley Hall, Chairman of the AMA Board of Trustees, said: "The AMA board believes that never before has the Medical Pac movement more strongly deserved and needed your support and the support of all members of the profession and the state and county medical societies. There should be maximum voluntary participation in the national and state Pacs, as independent organizations established under the law, by the entire profession and especially by its leadership. We urge strongly that the state medical associations use their influence in stimulating voluntary participation and that this participation be as universal as possible."

All legislation related to health and medicine originates in the U. S. House of Representatives. It follows then that the House becomes the starting or stopping point of all bills affecting health and the practice of medicine. This is why AMPAC and SCALPEL (one of the fifty arms of AMPAC) place such great emphasis on electing members to the House of Representatives who have a sympathetic understanding of the problems of organized medicine. Legislation detrimental to medical practice can thus be defeated.

As a practicing physician this effort deeply involves you, and I do not believe that we can afford the luxury of being too busy or disinterested. I am confident that most of you care, and I urge you to join this effort to preserve the free enterprise system of medical practice. Membership in AMPAC and SCALPEL is—and must be—everybody's job. Don't forget that your wife's partnership in politics is needed, and we welcome her membership too. JOIN TODAY FOR BOTH.

"The triumph of evil requires only that good men do nothing." Edmund Burke (1729-1797).

Joel W. Wyman, M.D., President

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50 YEARS AGO

The Journal of the South Carolina Medical Association

June 1918

More doctors were sought for the Armed Services.

The serious plight of many communities which were short of doctors because of their absorption by the Army was discussed.

It was noted that South Carolina had furnished about 200 physicians or about 15 percent of all the doctors in the state.

Editorials



WILLIAM PERRY, M.D.

At the Annual Meeting of the South Carolina Medical Association, Dr. William L. Perry was named president-elect of the Association. He will take office in 1969.

A native of Chesterfield, William L. Perry, M. D. was graduated from Wake Forest College and received his M.D. degree from the Medical College of South Carolina. He served his internship at McLeod Infirmary in Florence and has been in private practice since 1940.

Dr. Perry has been chairman of the Chesterfield County Board of Education for eight years, is a past president of Chesterfield County Society and Pee Dee Medical Association. He is a member of the American Academy of General Practice. Dr. Perry has been a councillor of the 6th Medical District for nine years and is currently chairman of council.

Annual Meeting Business

The Annual Meeting of the South Carolina Medical Association was held at Myrtle Beach on May 13-15, 1968 with more than 400 physicians present. The meeting was somewhat uneventful. New officers were elected as follows. President, William Perry of Chesterfield; vice-president, C. Tucker Weston of Columbia; secretary, Strother Pope of Columbia and J. Howard Stokes of Florence, treasurer.

Thomas Parker of Greenville was named delegate to the AMA house of delegates.

Harrison Peeples was elected alternate delegate to the AMA. J. D. Gilland was elected to Council. Reelected to Council were Martin Teague and Harold Hope.

Elected to the Mediation Committee were Robert Solomon, Gordon Able, Swift C. Black and W. A. Wallace. Clay Evatt Jr. was elected to the Benevolence Fund Committee. Harold S. Gilmore and Harold E. Jervey Jr. were re-elected members of the State Board of Medical Examiners. Richard Allison Jr. was named to the State Board of Nursing Examiners, and T. C. McFall to the Hospital Advisory Council to the State Board of Health.

The Association gave endorsement to the South Carolina Regional Medical Program for Heart Disease, Cancer, Stroke and Related Diseases.

In other resolutions, the house of delegates recommended that:

Registered hospitals in the state allow admission and treatment of alcoholics.

Direct billing of private patients under the South Carolina Medicaid program be permitted in accordance with federal law.

The AMA cooperate with the federal government in its investigation of "of the true reasons for rising hospital costs".

This resolution urged the AMA to collect per diem rates and utilization figures

from Veterans Administration and other federally controlled hospitals and insist that the data be utilized as a yardstick for evaluating hospitals costs in non-federally controlled hospitals.

The physicians also praised Sen. Strom Thurmond for opposing the confirmation of Wilbur Cohen as secretary of health, eduction, and welfare.

The Medical College of South Carolina presented a scroll to its former president, Dr. Kenneth M. Lynch, in appreciation of his past service.

The banquet speaker was Dr. William McCord, who filled the place of Governor McNair, whose presence was prevented by illness.

A resolution to change the composition of the State Board of Health was referred to a committee for study over the coming year.

It was reported that the bill in the legislature to bar advertising by any members of the healing arts would probably be defeated and was not being pushed too hard.

Direct billing for Medicaid patients was urged. A crown tax to provide funds for a center for alcoholics was suggested.

Family planning was endorsed, as was a resolution to revise the laws concerning abortion and sterilization. The State Board of Health was urged to pursue its active campaign of inspection of restaurants and cafes.

A committee on Mongolism was created. Resolutions called for establisment of financial need for patients accepted on the Vocational Rehabilitation program, and permission for examination of its candidates by the family physicians were approved.

The House voted that hospitals approved by Accreditation Commission should be acceptable to the Vocational Rehabilitation Commission.

A proposed amendment to limit to five the number of memberships of past presidents in the House was not passed. The resolution about coordination of benefits by Blue Cross was referred to a study committee. Resolutions concerning investigation of costs of hospital care, service of physicians on hospital boards, and allowance for certain automobile expenses as tax free items were approved. SCALPEL was commended.



John Booker, M.D.
Chairman of Council

At the reorganization meeting of Council on May 15, Dr. John Booker was elected chairman, and Dr. J. D. Gilland was named as clerk.

The date of the next meeting was set for July 10 at 2 p.m. at the offices of the State Board of Health in Columbia.

Dates for the next annual meeting were named as May 11-14, 1969.

QUIDNUNC

"A physician that has his tongue well hung, and is master of the art of persuading, fastens, by the mere force of words, such a virtue upon his remedies, and raises the faith and hopes of the patient to that pitch, that sometimes he masters difficult diseases with the silliest remedies; which physicians of greater learning could not do with noble remedies, merely because they talked faintly, and with a soft dead air."

George Baglivi (1668-1706)

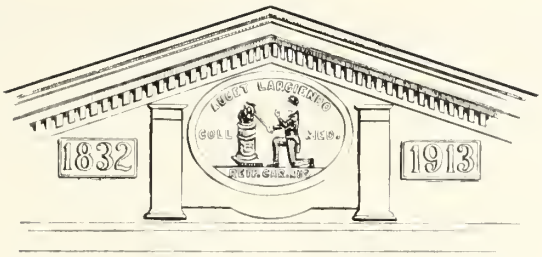
"Professors may be divided into four classes. There is, first, the man who can think, but who has neither tongue nor technique. Though useless for the ordinary student, he may be the leaven of a faculty and the chief glory of his University. A second variety is the phonographic professor, who can talk, but who can neither think nor work. Under the old regime he repeated year by year the same lecture. A third is the man who has technique, but who can neither talk nor think; and a fourth is the rare professor who can do all three, think, talk, and work."

Sir William Osler (1849-1919)



Dr. Alvin L. Rittenberg and **Dr. Henry W. Rittenberg** have removed their offices to 3939 Whipper Barony Lane, Charleston Heights. **Drs. J. C. Hedden, W. A. Wallace** and **E. Kenneth Aycock** recently participated in laying a cornerstone in the new Spartanburg County Health Department building. **Dr. Peter C. Gazes** of the Medical College, president-elect of the S. C. Heart Association, and **Dr. Donald E. Saunders Jr.** of Columbia, vice president, took part in the program of a recent conference of the American Heart Association in New York. **Dr. Carter P. Maguire,** clinical associate in surgery at the Medical College, has been elected president of the Coastal Medical Society. **Dr. Leon Banov Jr.** of Charleston was elected secretary-treasurer. **Dr. Harvey L. Burnette Jr.,** chief of staff and director of the student medical center at Bowling Green University, has been appointed director of health services at the University of South Carolina. Dr. Burnette, a 1945 graduate of the Medical College of S. C., replaces the late **Dr. Robert B. McNulty.** A native of Cheraw, Dr. Burnette is currently two-term president of the Ohio College Health Assn. and institutional representative to the American College Health Assn. **Dr. Charles R. Propst** of Sumter has been named one of 525 physician consultants to evaluate the medical aspects of Head Start program in communities throughout the United States. **Dr. Robert L. Wingate Jr.** has opened his office for the practice of internal medicine at 2800 Rosewood Drive, Columbia. A graduate of the Medical College of S. C., Dr. Wingate completed his internship at Cincinnati Ohio General Hospital and his residency training at Cincinnati, Medical College of Virginia, and Charity hospitals of Louisiana.

Dr. Edward M. Tracy has announced the opening of his office for the practice of internal medicine in the Charleston Medical Center. **Dr. Frank F. Espey** of Greenville, president of the Association of Surgeons of the Southern Railway System, presided at that group's annual meeting in Cincinnati April 21-24. **Dr. Margaret B. Neville** has succeeded retired Greenwood County Health Officer **Dr. J. W. Bell.** A native of Walterboro, Dr. Neville graduated from the College of Charleston and obtained her M.D. from the Medical College of South Carolina. In a ceremony held recently in Camden at the Selective Service office **Drs. Carl A. West** and **George S. Rhame,** medical advisors for the Kershaw County Selective Service Board, were presented with 25-year Certificates of Service. **Dr. George Dean Johnson,** Spartanburg pediatrician, was recognized this spring by the Spartanburg County Medical Society for outstanding work as a citizen and as a physician. Making the presentation was **Dr. Wardlaw Hammond.** Dr. Johnson has served as president of the Rotary Club, chairman of the District 7 School Board of Trustees, president of the Chamber of Commerce, and has received the Sertoma state award for Service to Mankind. He also has been president of the Medical Society and president of the S. C. Medical Association. Dr. Johnson is a delegate to the American Medical Association and is on its committee for constitution and bylaws. **Dr. Louis Stephens** will become president of the Clinton Chamber of Commerce. **Dr. Joseph I. Waring** of Charleston received an honorary degree of doctor of letters from the College of Charleston May 28. **Dr. William B. Gamble,** a Charleston pediatrician, was elected president of the Tuberculosis and Health Assn. of Coastal Carolina recently.



Medical College of South Carolina

Dr. Dale Groom was elected Chairman of the Board of Governors of the American College of Physicians at their annual convention held in Boston on April 1-5. Dr. Groom had served for two years as Vice-Chairman of the Board of Governors and was a member of the committee which produced the "Medical Knowledge Self-Assessment Program" conducted by the organization.

While attending the American College of Physicians convention in Boston, Dr. Groom presided over the General Session on Cardiology.

Eight scientific papers were presented April 15-20 by representatives of the Medical College at the annual meetings of the Federation of American Societies of Experimental Biology in Atlantic City, N. J. The Federation is the world's largest biological scientific organization.

Members of the Department of Otolaryngology attended several meetings of national otolaryngologic societies, April 18-26, in Hollywood Beach, Fla. Those attending included **Drs. F. J. Putney, C. S. Bagley, A. L. Lemel, Frank Young, Jack Thornton,** and **Cliff Chapman.** Drs. Putney and Young presented a paper entitled "Ossifying Fibroma of the Sinuses" before the American Laryngological Assn.

Dr. R. Ramsey Mellette served as moderator of the 7th annual Colloquium for Graduate Education of Non-Psychiatrist Physicians held in New Orleans.

Dr. George H. Orvin recently presented two papers on adolescents at the Oxford University Medical School, Oxford, England.

Nineteen students and faculty members from the Medical College participated in the 41st annual meeting of the S. C. Academy of Science April 26-27, on the University of S. C. campus in Columbia.

Dr. Curtis P. Artz was guest speaker at the annual Shaw Air Force Base sponsored Sumter-Clarendon County Medical Society meeting, April 4. On April 16, he spoke to the Postgraduate Medical Assembly in Atlanta and participated in various sessions of the American Surgical Assn. in Boston the 17-19th.

NEWS

The State Board of Health's Executive Committee acted March 27 on the recommendations of its Hospital Advisory Council for allocation of Hill-Burton Funds.

Funds totalling $5,434,661 are broken down into the categories of construction and modernization. This includes hospitals, long-term care facilities, public health, rehabilitation, diagnostic and treatment centers.

A total of $205,359 was allocated for rehabilitation centers. One hundred twenty-four thousand dollars was awarded to the S. C. Retarded Children's Habilitation Center in Summerville. The remainder will go to the construction of the new Easter Seal Rehabilitation Center in Columbia.

The Committee also approved $3,177,000 for new construction and modernization of general hospitals.

Eligibility for these funds is based on a priority determined by the number of existing beds serving the county's popula-

tion. Any county may use any or all of the total amount allocated if they meet the matching-funds requirement.

Three hundred seventy-three thousand and one hundred dollars will go to Columbia Hospital for construction of a diagnostic and treatment center. Sumter County will receive $140,000 to add to its public health center; Berkeley County will get $26,000 to build a new health center in Wando; and Richland County will receive $1,000 to complete construction of its recently expanded facility.

The council also makes recommendations on allocations for construction of mental health and mental retardation facilities, $184,619, to the proposed new Pee Dee Rehabilitation Center to be located near Florence.

In addition, $495,212 was approved for the construction of a new community mental health center in Columbia, and $112,692 to the Charles Lee Mental Health Center in Spartanburg.

* * *

Dr. Hilla Sheriff and the professional staff of the Child Evaluation Clinic of the State Board of Health appeared in one of a series of 11 educational television programs on mental retardation.

This series, entitled "The Other Three Percent," was made possible by a federal grant to Columbia College and through the cooperation of the S. C. Educational Television Center. The programs are designed to create a public awareness of mental retardation and what can be done for the mentally retarded. All aspects of mental retardation will be covered. Bill Houth wrote the script for the program.

"Retardation must be viewed as a national problem," said Dr. Sheriff. "In terms of magnitude, it's the most handicapping of all childhood disorders. Three percent of children are retarded, and the numbers are increasing. More than 125,000 mentally retarded babies are born in the United States every year, according to best estimates, and a much larger number probably function ineffectively throughout life, without ever being identified as retarded.

Public health efforts are aimed primarily at preventing conditions of disease and disability," she continued; "and even though there is much about mental retardation that we still don't know, we are rapidly gathering evidence that will help in the prevention of mental retardation."

Dr. Sheriff's part in the program was filmed in the Baptist Hospital Nursery.

A special four-bed ward for intensive care of cardiac patients is under construction and scheduled for operation in May at Greenville General Hospital.

MEDICAID APPROVED FOR STATE

South Carolina's Medicaid program, expected to cost $16 million the first year, received final approval this spring from the Health, Education and Welfare Department, Social and Rehabilitation Service.

Covering only welfare recipients, the program will receive 80.5 percent of its funds from the federal government to provide free health care for an estimated 75,000 persons.

The Medicaid program was authorized by Congress two years ago, and South Carolina is the 41st state to use it.

It is the second major federal government program dealing with payment of medical expenses. The other, Medicare, is designed for persons over 65.

Medicaid is aimed at aid to the indigent on the state's assistance roles, without regard to age.

Five basic services will be provided by the Palmetto Medicaid project. They are inpatient and out-patient treatment, nursing home care, physicians' services, x-ray and laboratory services.



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The federal government has established a new agency and appointed two new advisory committees in the health care field.

The new agency is the National Center for Health Services Research and Development. The committees are:

1. The Medical Assistance Advisory Council that will advise the secretary of Health, Education and Welfare on matters relating to federal-state medical aid programs.

2. A panel to give the social security commissioner advice on experiments to find new methods of reimbursing hospitals and physicians for health care under medicare and other federal health programs.

Health, Education and Welfare spokesmen said the new center will work with universities, industry, hospitals, practitioners and research institutions to seek new ways of delivering health care, was authorized by Congress last year at the Johnson administration's request.

"The ultimate goal of the center is to aid practitioners and institutions involved in health services to improve the distribution and quality of services and to make the best possible use of manpower, funds, and facilities." said Dr. Philip R. Lee, assistant HEW secretary for Health and Scientific Affairs.

The immediate goals of the center were listed as:

—More efficient utilization of health personnel, including the development of new types of health workers at the professional, technical and auxiliary levels.

—Increased productivity and better management of all elements of the medical care system to improve quality and moderate rapidly rising costs.

—Technological innovation, for immediate application, to achieve cost reduction and quality improvement.

—To survey and analyze health systems, including costs and financing and to test new concepts and systems of health care delivery.

—To recruit, train and develop personnel for health services research, including the establishment of regional, non-Federal centers for health services research and training.

—Collection and correlation of existing information on health services delivery for planning and organization design.

—Initiation of systems studies of institutional design, construction, equipment and maintenance and support of construction of cost-saving innovations.

Director of the center, which is under the newly created Health Services and Mental Health Administration, is Dr. Paul J. Sanazaro, who had directed education and medical care research for the Association of American Medical Colleges since 1962.

HEW said the advisory council would be consulted on program development and practical operational problems involved in Medicaid (Title XIX of Social Security). Such programs are in operation in 38 states, Guam, Puerto Rico and the Virgin Islands. Rashi Fein, Ph.D., a chief economist at the Brookings Institution, was named chairman of the 21-member council which includes six physicians:

John B. Farley, Pueblo, Colo.; Thomas B. Georges, Pennsylvania health and welfare official; Amos N. Johnson, Garland, N. C.; Maynard Shapiro, Chicago, president-elect of the American Academy of General Practice; George W. Slagle, Battle Creek, Mich., chairman of the American Medical Association's Council on Medical Service, and Donald Smith, public health professor at the University of Michigan.

The Social Security Administration said the reimbursement panel would review proposals for experiments submitted by institutions and individuals in the health care and health insurance fields. After such reviews, it will be asked to recommend the ones it believes to have the greatest potential.

Nathan J. Stark, a Kansas City, Mo.,

businessman is chairman of the 17-member group. Four members are physicians: Solomon J. Axelrod, University of Michigan; Thomas W. Georges, Jr., Pennsylvania welfare official; Donald R. Hayes, Springfield, Mass. and Pierre J. Salmon, San Mateo, Calif., county public health and welfare official.

* * *

The American Medical Association urged that Congress appropriate maximum amounts for support of medical education.

The AMA position was outlined by Dr. C. H. William Ruhe, director of the AMA's division of medical education, at a hearing of a House appropriations subcommittee.

"We recognize the present concern of the Congress and the nation for an overall reduction in federal expenditures," Dr. Ruhe said "However, we believe that the urgent need for more physicians merits the funding, to the fullest extent possible of legislation supporting medical education. . . .

"An urgent need exists in this country for more physicians to meet the health care needs of the American public. This need can only be met effectively by a major increase in the capacity of American medical schools to educate more physicians."

Dr. Ruhe noted that Federal aid to medical schools under the proposed Health Manpower Act of 1968 would not become available before 1970. Therefore, he said efforts must be made to secure the essential immediate increase in financial support through increased appropriations under existing law. He listed the Health Professions Educational Assistance Act, the Health Research Facilities Construction Act, the Medical Act, and the general research support authority of the National Institutes of Health.

* * *

Gov. Nelson Rockefeller of New York and two other witnesses at a Senate subcommittee hearing supported national compulsory health insurance as a solution of the problem of rising health care costs.

The other witnesses were Olcott D. Smith, chairman of Aetna Life and Casualty Company, who expressed belief that private companies could work with the government effectively on such a program, and economist Victor Fuchs.

But Wilbur J. Cohen, acting secretary of Health, Education and Welfare who favored the plan 20 years ago, said he now believes the government should move on other fronts. He said it would be difficult—a "monumentable task"—at this time to achieve a workable and acceptable program of compulsory national health insurance. He did not foresee the United States following the pattern of European nations in adopting a monolithic central health system for the entire nation. He said this country is too large for a single plan but that the benefits under any various plans adopted should be relatively uniform for all Americans.

Cohen said first priority now should be given maternal and child health programs. He listed as other "must" programs the expansion of medical manpower and health facilities and the continued investment in health research.

Sen. Abraham Ribicoff (D., Conn), chairman of the subcommittee holding hearings on health care costs, also said that the emphasis now should be on more immediate solutions. He said that his experience with the fight over medicare had convinced him that it would be a long time before Congress would accept compulsory national health insurance.

He said that the first week of the hearings "made clear that a health care system in America must include everyone—public and private organizations, insurance companies, the Blues, the voluntary hospitals, nursing homes, medical societies, individual private practitioners. those who practice medicine in groups, and state, local and federal agencies."

* * *

Manufacturers of oral contraceptives are being asked by the Food and Drug Ad-

ministration to revise uniform labeling for the products to reflect findings from research in Great Britain that there is an association between the use of oral contraceptives and thromboembolic diseases.

Dr. Herbert L. Ley, Jr., director of the FDA's Bureau of Medicine, notified the manufacturers of the publication of the British reports in the April 27 issue of the British Medical Journal. He called the companies to a Washington meeting for discussion of "prompt revision of uniform labeling."

Proposed labeling changes, based on preliminary results and unofficial reports of the British findings, had been submitted to U. S. manufacturers by the FDA last month.

The proposed now FDA labeling would reflect the findings of the British studies and would be aimed at prescribing physicians, an FDA spokesman said.

TRANSPLANT BILL APPROVED

The South Carolina General Assembly has given final approval to a bill designed to relieve a physician of legal responsibility for the health of transplanted organs and transfused blood.

ADVISORY COUNCIL MEETS

At a meeting of the Governor's Advisory Council for Comprehensive Health Planning Dr. E. Knneth Aycock, State Health Officer, was named chairman. Dr. James A. Morris is 1st vice-chairman; Dr. Martin M. Teague, 2nd vice-chairman and Mr. Harry R. Bryan, alternate chairman.

MEETINGS

The Sixth National Cancer Conference, sponsored by the American Cancer Society and the National Cancer Institute, will be held in the Denver Hilton Hotel, Denver, Colorado, Sept. 18-20.

For more information write: Dr. Roald N. Grant, c o American Cancer Society, 219 East 42nd St., New York, N. Y. 10017.

The Ninth American Medical Association Air Pollution Medical Research Conference will be held at the Denver Hilton Hotel, Denver, Colorado, July 22-24.

The Great Smoky Mountains Pediatric Seminar is scheduled for June 13-15 at the Gatlinburg Inn, Gatlinburg, Tenn.

A planning grant of $30,018 in federal funds has been allocated to the Greenville Hospital System through the South Carolina Regional Medical Program (SCRMP). The grant will be used to develop "cooperative arrangements among agencies and institutions within the Greenville area as the basis for comprehensive patient services and for educational programs which may serve as a model for comparable programs elsewhere in the region."

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ROLE OF THE STATE BOARD OF HEALTH IN MEDICAL CARE

MALCOLM U. DANTZLER, M.D., M.P.H.
Assistant State Health Officer

The meaning of the term, medical care, has changed with the rapid and continuing development of medicine. It is now commonly used to include all kinds of personal health services provided to individuals by physicians, dentists, pharmacists, nurses, social workers, and other health professionals. In 1900, medical care consisted primarily of the contents of a little black bag and the single guiding hand of the family doctor at the patient's own bedside. Now, these are being supplanted by the technical capacity of the modern hospital and the skills of many specialists. Coincident with these changes have come problems of complexity and rising costs, problems in achieving accessibility to and continuity in services; problems of fragmentation and depersonalization in patient care.

The great success achieved in the control of practically all of the major contagious diseases and other factors have created changing health needs and changing patterns in the organization and financing of personal health services. Our people are living longer on the average and are increasingly encountering the degenerative diseases and chronic disabilities. Industrialization, urbanization, and higher standards of living contribute to increased capacity to provide and to use services. Rapid population growth, higher levels of educational attainment, and increased population mobility also influence the rising demand for health services and create a need for better patterns for their delivery.

Many of the advances in modern medical care have occurred as a result of improved methods and skills in organization which make possible division of labor and the coordination of specialized tasks. Technological advances have produced a high degree of specialization which generates a need for organization. When patients experience difficulty in finding and using medical care from numerous independent specialized sources, organization becomes a necessary means for coordination of services and focusing on the total patient. Hospitals and nursing homes, group practice, home care programs, and public health programs are examples of means to provide such organization.

The growth of the medical care industry toward being the largest in the country and the increasing expenditures for medical care reflect, in part, increasing use of personal health services. More people are seeing physicians and dentists more often now than they did 30 years ago. More diseases and disabilities are now capable of treatment in a more definitive fashion through the array of equipment and personnel available in organized settings such as hospitals, group clinics, and nursing homes.

Medical care means many things to many different people. It is the treatment of measles in one child but it is also the vaccination of another child to prevent the disease. It is the surgery performed to remove a breast cancer but it also includes the annual examination which detects such conditions at an early stage. It is the physician, the dentist, the nurse, and the pharmacist practicing their professions but it is also the drugs, the surgical instruments, and the array of equipment used by them in caring for patients. It is the hospital with its facilities, clinics, and laboratories, but it is also the State Agency which inspects and licenses the hospital, the State-Federal Hill-Burton Program which contributes funds toward construc-

Presented to the Executive Committee of the State Board of Health, March 27, 1968.

tion of a new wing, and the insurance plans which reimburse the hospital for services provided their subscribers.

There is more to medical care than the diagnosis and treatment of disease in the individual. Medical care must be defined broadly to encompass the complete range of personal health services—the promotion of health, the prevention of disease, early detection of disease, diagnosis, treatment, and rehabilitation of the patient. These personal health services are produced, financed, and delivered through a variety of private and public activities. The term, "medical care," must therefore be broadly conceived as including the entire complex of personal relationships and organized arrangements through which these health services are made available to the people.

The principal interaction in the medical care complex is between the people needing personal health services and those who provide the services. This interaction may be intimate and personal between a patient and his physician. It may be indirect and somewhat impersonal as in a mass immunization campaign.

The clinic and the hospital do not provide health services in themselves but are essential institutions through which physicians, dentists, nurses, and other health personnel may organize to provide services and where many patients with a variety of conditions may be cared for efficiently and effectively.

Medical care programs that organize and/or finance the delivery of health services must obviously have relationships with both the people needing and the people providing services. When properly designed and administered, these programs can facilitate more effective interaction between the providers of service and their patients. They have the potential for focusing the variety of specialized knowledge and skills represented by the providers of services on the patient as a whole, rather than diverging to treat independently the patient's separate organ and body systems. These programs can also pool the financial resources of groups of individuals to effect an equitable distribution of the costs of services and provide adequate compensation for services rendered.

Most providers of health services believe that only their professional peers are qualified to evaluate their technical performance. Only a similarly trained and experienced physician or dentist is believed competent to judge the quality of medical or dental services provided by another. A nurse will carry out the orders of a physician in caring for a patient or a social worker will seek consultation and advice from a psychiatrist, but only other nurses or other social workers are believed to be qualified to evaluate their professional performances related to nursing and social work skills. While most providers recognize that sound professional practice is a partnership between the health team and the patient and his family, they hope that non-professional, social or economic considerations will facilitate rather than frustrate their efforts to provide good medical care for their patients.

As previously stated, the central focus of medical care is the direct relationships between the person needing health services and the persons who provide the services. The first essential element of medical care, therefore, is accessibility. Good medical care must be accessible to the individual at the time and place he needs it. This implies a portal of entry into the medical care complex which can best be furnished by providers of service, like the family physician and dentist, who view their task as a continuing personal relationship with patients.

A century ago the family doctor served as physician, surgeon, midwife, dentist, pharmacist, and family counselor and advisor. Today it is not possible or desirable to demand all these roles of one individual. A *comprehensive* range of health services is now required in order to pre-

vent disease, to detect disease and disability in the earliest stages, to diagnose and treat the patient as well as to rehabilitate him to his fullest capacities. These must be readily accessible to the provider of service who functions in a central relationship with his patient so that he, in turn, can make them accessible to his patient as they are needed.

In order that all persons can be assured *access* to a *comprehensive* range of personal health services whenever they might be needed, these services must be made *available* in quantities sufficient to meet the need for them. Since it is only one of a number of systems which make up society, the medical care complex must compete for resources of manpower, money, and materials. Mechanisms for assessing health needs and for planning an adequate supply of services which are responsive to technological developments and increased knowledge are, therefore, a fundamental requirement for good medical care.

Medical care of high quality implements the most up-to-date knowledge and techniques available to the health sciences. Factors influencing the quality of care include the professional competence of providers of service, consumer appreciation of and demand for quality medical care, and the mechanisms which enforce minimum standards and stimulate improvement of these standards. The competent practitioner is in a position not only to improve his own performance by continuing education and learning experiences but also to improve the quality of medical care generally by insisting upon high standards of performance among his colleagues and co-workers.

As a minimum, good medical care must make acceptable, to the patient, standards of care which have been objectively determined and tested, such as beginning prenatal care in the first trimester of pregnancy and not giving transfusions unless blood is successfully cross-matched with that of the donor.

Society, through its public and private agencies, cannot always legislate or enforce the very highest standards of excellence in the provision of health services. These depend upon the competence of practitioners and the acceptance of and demand for high quality by the people who receive services.

Another essential element for good medical care is efficiency which includes economy. Consumers need financing mechanisms which permit advance budgeting for medical care costs and which economically spread the risk of these costs over many individuals. Providers of service benefit when efficient organization and financing provides them adequate compensation. Efficient administration of medical care programs promotes the economical use of health resources and provides a means of achieving good medical care for the State.

Medical care administration has been defined as the process which integrates program goals, structure, and functions with the environment of the medical care complex. A program's goals must be compatible with the resources available to it and consistent with the goals of the community in which it operates. They must also be related to the population served by the program and to the providers of service and the other programs with which it cooperates. The structure of a program is its plan for organizing manpower, information, money, and materials.

The administrative procedures of medical care administration are program planning, management, and evaluation. Goals, structure, and functions are defined through program planning. Program management arranges for functions to be performed within the program's structure which are designed to achieve the program's goals. Program evaluation is concerned with assessing the degree to which a program is capable of achieving good medical care.

Program planning involves description and analysis of needs and resources, con-

sideration of alternative uses of resources to meet needs, and deciding on program goals, structure, and functions. Program management is concerned with (1) establishment of an information system about the program's operations and procedures, (2) development, coordination, and maintenance of relationships within the program, and between the program and its consumers, providers, and the community at large, (3) developing and maintaining standards of quality and quantity in the services provided, and (4) efficient and economical use of resources.

Evaluation of medical care programs is based on four principles:

(1) An objective basis for evaluating achievement of goals should be defined.

(2) Appropriate indices related to the components of good medical care should be identified which can be measured in relation to the goals.

(3) The problems encountered in achieving goals should be outlined and means devised to cope with them.

(4) Program goals, structure, and functions must be refined and redefined as a result of continuing program evaluation.

As more and more environmental hazards have been conquered by primary preventive measures, the quantity and quality of medical care available to the people is the chief determinant of the health status of the people to which public health personnel may contribute. As health measures for the control of contagious diseases and environmental hazards become "holding actions," the public appreciation of their importance lessens. On the other hand the public is keenly aware of difficulties experienced or anticipated in securing satisfactory medical care.

Medical care in South Carolina, while achieving high levels in many areas, is uneven. There are pockets of people in every community whose health conditions make health professionals uncomfortable.

The State Board of Health is the official representative of the people's interest in health and has special responsibility to act for the people because the great majority of individual consumers do not have the knowledge to make determinations about the quality of medical care nor to influence effectively the organization of health services on an individual basis.

The medical care industry is growing rapidly in response to growing public demand for adequate health services. It may soon become the largest industry in the country. It is exceedingly complex with many operating units in private, voluntary, and governmental sectors. It is short in manpower and facilities so it is incumbent upon health professionals to work for efficient and effective use of all available resources. As with all preventive principles, organizations which enunciate them should be the first to adopt them as an example to its peers.

The State Board of Health has long been active in the area of medical care administration. This has been featured in the past forty years in the development and implementation of numerous public health programs such as those for Crippled Children, Maternal and Child Health, Venereal Disease Control, Tuberculosis Control, Cancer Control, Heart Disease Control, etc. It is anticipated that these specialized program activities will continue with perhaps closer correlation with an overall medical care administration program.

In the last two or three years, several new national medical care programs have been established which involve participation of the State Board of Health. The interrelationships between these programs and existing programs have created a need for coordination and cooperative program development. This has resulted in a decision to form a new Bureau of Medical Care Administration which would consolidate the programs of the State Board of Health designed to help achieve adequate comprehensive medical care of good quality for all the people of South Carolina.

A key unit of the new Bureau which has been functioning well for twenty years is the Hospital Construction Division which might be relabeled as the Health Facilities Division or Hospital and Medical Facilities Division. This division now develops and implements official State plans for using Federal aid in the construction and modernization of hospitals, long-term care facilities, public health centers, diagnostic and treatment centers, rehabilitation facilities, community mental health centers, and mental retardation buildings. The division also inspects and licenses hospitals and nursing homes (other than those in the mental health field) according to minimum licensing standards established by the State Board of Health. Because of their training and experience, the personnel of this division participate in evaluations of institutional care necessary in other programs.

The Health Insurance Division was established in 1966 to perform the functions which Congress authorized for State health agencies in the Health Insurance for the Aged program. These include survey of providers of health care (other than private practitioners) who volunteer to participate in the program, to certify the degree of their compliance with the Conditions for Participation set by the Federal Government and to consult with all who are not in compliance with these conditions because of substantial deficiencies. Also involved is coordination of these activities with related activities of the fiscal intermediary (Blue Cross) and also with related medical care programs.

It is planned that a new Health Services Division will be formed to help reach the goal of quality health services for all citizens of South Carolina. This division would be responsible for the Home Health Services Section which was also formed in 1966. This section developed out of many years of effort to provide ancillary services to homebound persons which would assist their family physicians in their care. The Health Insurance for the Aged Act stimulated development of such home health services throughout the country by providing a means for financing them for the elderly, who need them most, on a non-profit basis. All hospitals and nursing homes in the State were informed about this but so far only two agencies outside the State Board of Health have qualified to provide home health services: the Greenville Visiting Nurse Association and the Aiken Easter Seal Center. Because we feel that there is a considerable need for these services, the State Board of Health has endeavored to help each County Health Department meet the Conditions for Participation. Ultimately, we hope to have the services of skilled nurses, physical therapists, speech therapists, medical social workers, and home health aides to be available in each county on the prescription of the family physician to assist on an intermittent basis with the care of homebound patients. We are now operating on a limited basis in 37 counties. Patients are charged for these services on a cost basis and all financing is handled through the Central Office in Columbia.

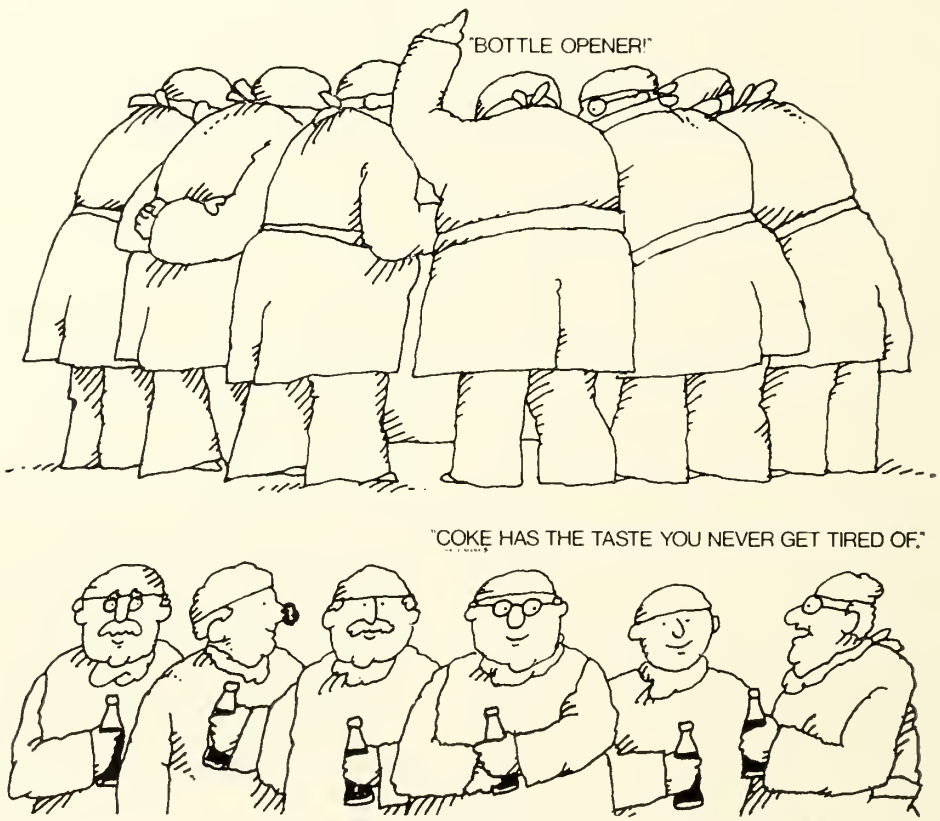
Another function of the Health Services Division has grown from the Chronic Illness Program established by Congress in 1961. This work has been directed by the Disease Control Division and has been designed to help improve patient care in nursing homes and hospitals by educational and consultative means, especially in the areas of nursing care and diet management. As a result of the national program changes contained in the Social Security Amendments of 1967, it is proposed to enlarge this work to arrange for necessary consultation with providers wishing to provide services under Title V (Maternal and Child Health) and Title XIX (Medical Assistance) of the Social Security Act and for necessary evaluation of the utilization and quality of medical and remedial services under Title XIX.

A more generalized and major function of the Bureau will be that of the Program Planning or Grants Management Divis-

ion. This division will supervise within the State Board of Health the detailed planning and evaluation of public health programs and the compilation and review of reports of activities and accomplishments. This has long been a major responsibility of the State Board of Health and it has been accentuated by the Partnership for Health Act of 1966 which transferred to the States from the Federal Government considerable decision-making power over use of Federal assistance for public health programs of the States. In this connection, the Office of Comprehensive Health Planning has been set up directly under the State Health Officer to review the overall health needs of the State in the areas of manpower, facilities, and services and to make recommendations to the Governor for meeting unmet needs on a priority basis. The Program Planning or Grants Management Division will help develop plans for the activities of the State Board of Health which will be consistent with the recommendations of the Office of Comprehensive Health Planning. In particular, this will apply to the formula grant for public health services under Section 314(d) and the project grants under Section 314(e) of the Public Health Service Act.

Another important existing division to be included in the new Bureau is the Narcotic and Drug Control Division. This unit has a special charge to enforce State laws pertaining to narcotics and drugs and to cooperate with local, Federal, and other State law enforcement officials in related activities. It is also providing consultation to providers of health services in the proper handling of narcotics and drugs and is supervising the handling of drugs within the State Board of Health.

The new Bureau of Medical Care Administration has a challenging and vital task to work with the providers of health services in South Carolina toward a goal of adequate comprehensive quality health services for all. It is hoped that its staff can be augmented so that it will have the capability to provide worthwhile consultation in all the major professional areas of health service sufficient to meet the demand.



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New Pharmaceutical Specialties

by Paul De Haen

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Duplicate Single Products—Drugs marketed by more than one manufacturer.

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NEW SINGLE CHEMICALS

SULLA

Sulfonamide. Rx

Manufacturer: A. H. Robbins Co.

Nonproprietary Name: Sulfameter

Indications: Acute and chronic urinary tract infections.

Contraindications: Hypersensitivity to sulfonamide derivatives, including antibacterials, oral hypoglycemics, and thiazides; marked renal or hepatic impairment; not for generalized bacterial infections; not for pregnant women near term or nursing mothers.

Dosage: Patients over 100 lbs. or 12 yrs. of age: First day—1500 mg, single dose. Maintenance—500 mg, single daily dose. Not for children under 12 yrs.

Supplied: Tablets—500 mg, bottles of 50 and 500.

TEGRETOL

Trigeminal neuralgia. Rx

Manufacturer: Geigy Pharmaceuticals

Nonproprietary Name: Carbamazepine

Indications: Trigeminal neuralgia

Contraindications: Known sensitivity to any of the tricyclic compounds such as amitriptyline, desipramine, imipramine, etc. Use with MAO inhibitors is not recommended.

Dosage: 100 mg with meals, twice on the first day, gradually increased by 10 mg q12h until freedom from pain. Maintenance—400 to 800 mg daily.

Supplied: Tablets—200 mg, bottles of 100 and 1000.

DUPLICATE SINGLE PRODUCTS

HISTASPAN

Antihistamine. Rx

Manufacturer: USV Pharmaceutical Corp.

Nonproprietary Name: Chlorpheniramine maleate

Indications: Symptomatic relief of allergic manifestations in vasomotor rhinitis, hay fever, urticaria, angioneurotic edema, sensitivity reactions, insect bites, other itching skin conditions including pruritus ani, pruritus vulvae, pruritus of drug rash, atopic dermatitis and contact dermatitis.

Contraindications: Known hypersensitivity to the drug.

Dosage: One capsule q12h. Not for children under 12 yrs.

Supplied: Capsules, sustained release—8 and 12 mg, bottles of 100.

MANDACON

Antiinfective—Urinary. Rx

Manufacturer: Conal Pharmaceuticals

Nonproprietary Name: Methenamine mandelate

Indications: Long-term management of chronic as well as milder subacute urinary tract infections.

Contraindications: Severe renal insufficiency; history of previous hypersensitivity to the drug.

Dosage: Adults—Two tablets qid or less as required, with liberal fluid intake. Older children—reduce dosage in proportion to age and weight.

Supplied: Tablets—500 mg, bottles of 160.

SORBITRATE

Cardiac depressant. Rx

Manufacturer: The Stuart Co.

Non proprietary Name: Isosorbide dinitrate

Indications: Angina pectoris

Contraindications: History of hypersensitivity to the drug.

Dosage: 5 to 10 mg orally or sublingually, 3-4times daily.

Supplied: Tablets—5 and 10 mg oral, bottles of 100. 5 mg sublingual, bottles of 100.

COMBINATION PRODUCTS

LIQUIMAT-HC

Corticoid—Local. Rx

Manufacturer: Texas Pharmacal Co.

Clinic—Type Suburban Progressive practice for sale. New Building—X-Ray and laboratory facilities—Five examining rooms fully furnished with modern equipment. Excellent collection experience. Physician deceased. Due to premature death. Immediate occupancy available. Four hospitals within ten mile radius. Terms for lease can be arranged.

Write to: Mrs. J. Gordon Smith, 3130 Curtis Road, Knoxville, Tennessee 37918

Composition: Sulfur 5%
Hydrocortisone 0.5%
Alcohol 22%

Indications: Acne, acne rosacea, seborrheic dermaanxiety or its related symptoms.

Contraindications: Tuberculous, fungal, and most acute viral diseases of the skin. Not for treatment of cutaneous manifestations of pemphigus or lupus erythematosus. Not for ophthalmic use.

Dosage: Apply to affected area twice daily.

Supplied: Lotion, tinted—plastic bottles of 1.5 oz.

SORBITRATE w. Phenobarbital

Cardiac depressant. Rx

Manufacturer: The Stuart Co.

Composition: Isosorbide dinitrate 10 mg
Phenobarbital 15 mg

Indications: Angina pectoris accompained by anxiety or its related symptoms.

Contraindications: History of hypersensitivity to the ingredients.

Dosage: 5 to 10 mg orally or sublingually, 3-4 times daily.

Supplied: Tablets—bottles of 100.

BOOK REVIEWS



ORGANIZATION AND MANAGEMENT OF FAMILY PRACTICE. Prepared by the Committee on Medical Economics of the American Academy of General Practice. Kansas City, Missouri, 1968 Pp 103.

The title of this book covers a wide range of interest in an able and attractive way.

It was developed by the Academy of General Practice's Committee on Medical Economics, with sections prepared by members of the Society of Professional Business Consultants, a Chicago-based national association of business management consultants. It is a very successful attempt to provide expert advice in an area largely neglected by medical schools and professional organizations.

The handbook has been made available to all Academy members. It is free of charge to medical students, interns, residents and medical school and hospital libraries, on request. Others may obtain copies at $1 a copy from the American Academy of General Practice, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

J. I. W.

PHYSICAL STANDARDS IN WORLD WAR II, prepared and published under the direction of Lt. Gen. Leonard D. Heaton; Editor in Chief Col. Robert S. Anderson and Editor for Physical Standards Charles M. Wiltse. Office of the Surgeon General, Department of the Army, Washington, D. C. 1967. Pp 356. $3.00.

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This volume gives an historical sketch of the development of modern methods of selection of candidates for the army. It describes the establishment of physical examinations in 1814, and the introduction of mental testing in 1841. It notes that both were performed very unsatisfactorily during the Civil War.

The various standards of examination are described, and present day procedures of induction are given along with the details of the methods of examination in current use. The importance of strict observance of these standards in military planning is stressed.

J. I. W.

SURGERY OF THE AGED AND DEBILITATED PATIENT—Edited by John H. Powers, M.D., W. B. Saunders Company-Philadelphia 1968, Pages 611. Price $19.00

A multi-author book by contributors outstanding in their respective fields. It is a study based upon hospital and vital statistics as well as the personal experience of the contributors. Emphasis is placed upon the process of aging and the incidence and nature of debilitating and degenerative diseases. Special consideration is given to cardio-respiratory and thromboembolic complications. Operations are discussed with regard to type and magnitude, however only little space is given to the technical performance. The tone is optimistic. The book constitutes a valuable source of information for internists as well as surgeons.

William H. Prioleau, M.D.

ATLAS OF HERNIA REPAIR—Carl H. Calman, C. V. Mosby Company, St. Louis. 1966. Pages 159, $16.75

A comprehensive well balanced consideration of the anatomical development and the methods of repair of abdominal hernias. Emphasis is placed upon the application of sound surgical principles in the use of available tissues. It is illustrated by a generous number of line drawings with the anatomical structures clearly designated. The text is descriptive as well as critical. It is highly recommended as a ready reference and valuable surgical guide. It gives promise of supplanting other publications of its kind.

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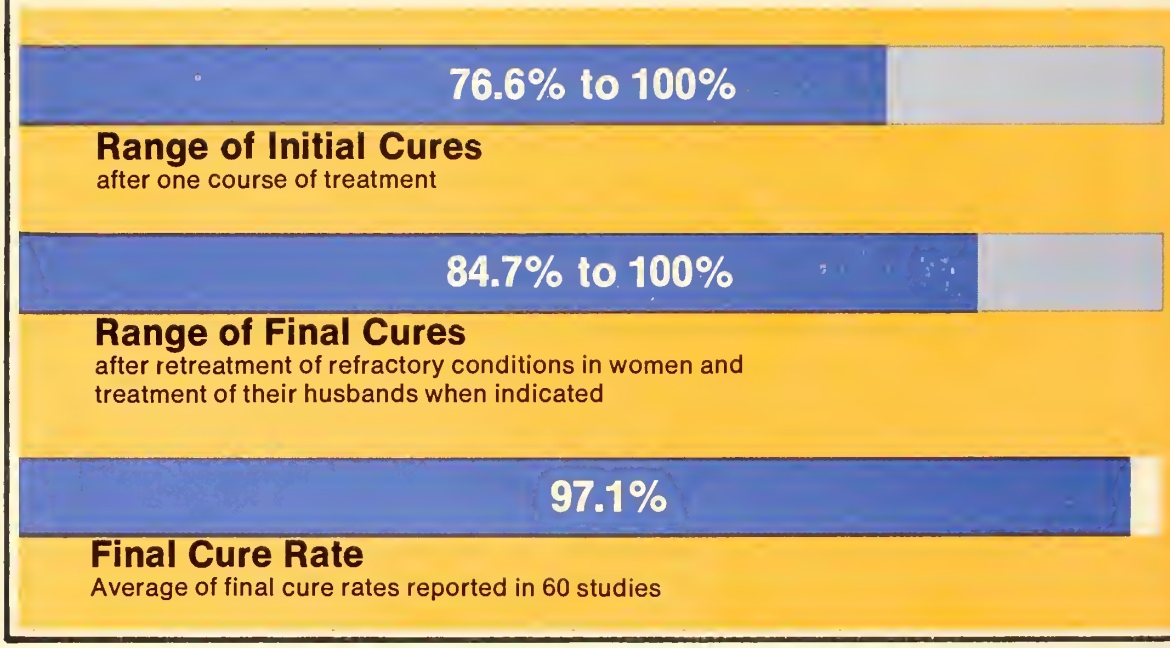


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Cure rates in 10,700 patients
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Indications: Flagyl is indicated only in the treatment of trichomoniasis in both men and women.

Contraindications: Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution: Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects: Infrequent and minor side effects include nausea, metallic taste and furry ton Gastrointestinal disturbances, flushing and h ache sometimes occur, especially with conc itant ingestion of alcohol. The taste of alcoh beverages may be altered. Other effects, al ported in an incidence of less than 1 per cent diarrhea, dizziness, vaginal dryness and burn dry mouth, rash, urticaria, gastritis, drowsi insomnia, pruritus, sore tongue, darkened u anorexia, vomiting, epigastric distress, dys depression, vertigo, incoordination, ataxia,

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metronidazole

rclinical practice an occasional uncooperative or drug-sensitive patient
spouse makes 100 per cent cure of trichomonal vaginitis in large series
patients difficult.

Further a very few patients who apparently absorb Flagyl poorly
l a few rare instances of trichomonads resistant to Flagyl have been
orted. Nevertheless, approximately half the United States investiga-
s report a final cure rate of 100 per cent with Flagyl.

Sixty papers[1] published on the use of Flagyl in trichomoniasis in the
ited States and comprising a total of 10,700 patients have been evalu-
d. In thirty of the papers it was declared that all patients adequately
owed and treated were free of trichomonal infection.

Analysis of all of these papers shows that the incidence of cures for
initial course of therapy ranged from 76.6 per cent to 100 per cent.
cure rates after retreatment of female patients and treatment of their
bands when indicated ranged from 84.7 to 100 per cent. The average
l cure rate reported in all investigations was 97.1 per cent.

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abness or paresthesia of an extremity, joint
s, confusion, irritability, weakness, cystitis,
ic pressure, dyspareunia, fever, polyuria, in-
tinence, decreased libido, nasal congestion,
titis and pyuria. Elimination of trichomonads
aggravate candidiasis.

age and Administration: In women: one
5-mg. oral tablet three times daily for ten days.
aginal insert of 500 mg. is available for local
apy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

In men: When trichomonads are demonstrated, one 250-mg. oral tablet twice daily for ten days in conjunction with treatment of his female partner.

Dosage Forms: Oral tablets—250 mg.
Vaginal inserts—500 mg.

1. Complete list of references on request.

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Concomitant relief of G.I. gas distress—
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in 87.5% of 104 patients after a total of 20,459 documented days of therapy.[2]

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References: 1. Hoon, J. R.: Arch. Surg. 93:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart

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PRECAUTION: Other salicylates should not be taken concurrently. Do not exceed recommended doses.

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Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REOIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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Butazolidin® alka in rheumatoid arthritis.

If it doesn't work in a week, forget it.



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Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



Dosage in Rheumatoid Arthritis: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response. (B)46-070-

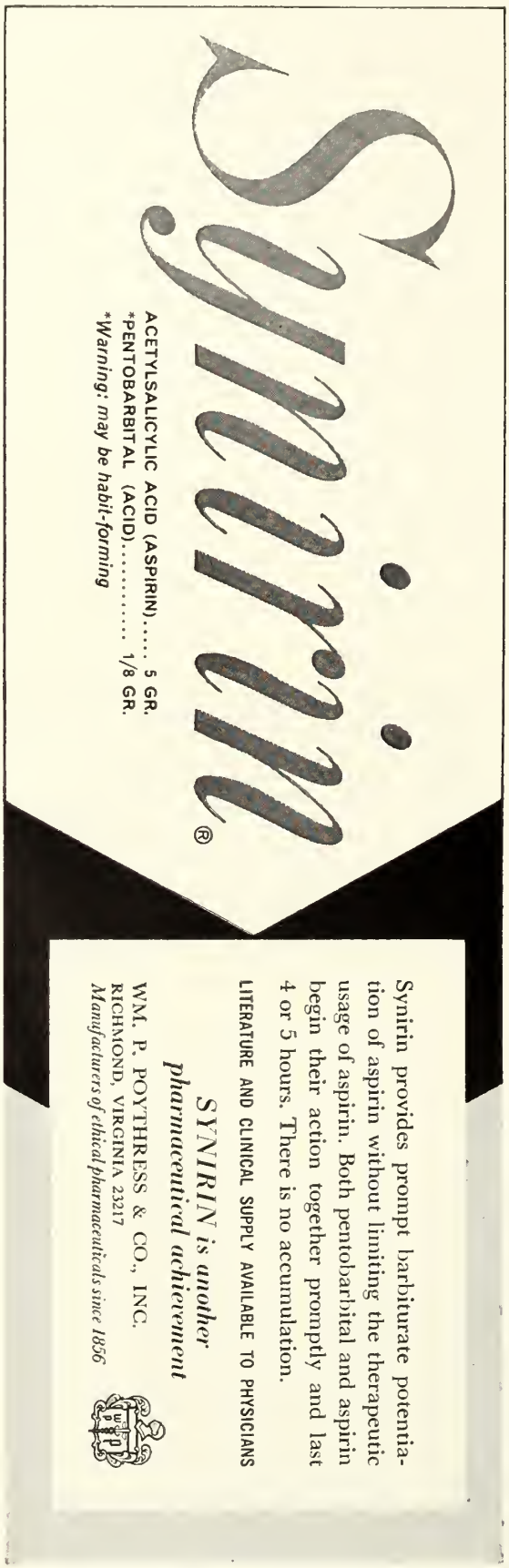
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Most bronchodilators for use in pulmonary emphysema contain ephedrine-like drugs. ELIXOPHYLLIN® never did. So, ELIXOPHYLLIN will not cause tachycardia, palpitations, nervousness, insomnia, or other undesirable side effects of ephedrine-like products. Even patients with hypertension, cardiac insufficiency, hyperthyroidism, prostate hypertrophy and glaucoma can take ELIXOPHYLLIN.

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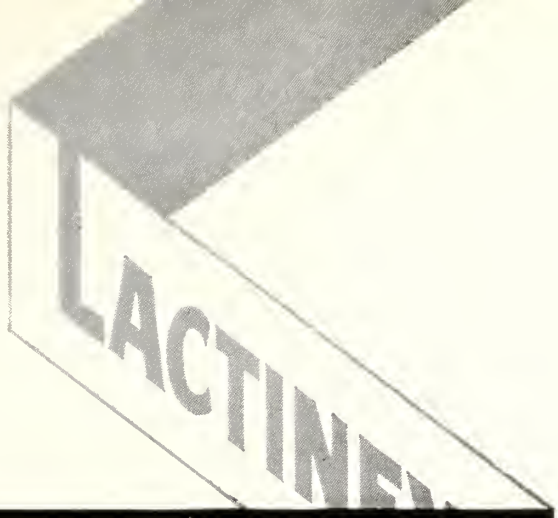
ELIXOPHYLLIN is theophylline in free and soluble form—resulting in rapid and dependable absorption with less risk of gastric irritation.

Adult maintenance dosage in bronchitis and pulmonary emphysema: one ounce (30 ml.) t.i.d. on arising, at 3 P.M., and on retiring. Adjust dosage to patient response. This average dosage provides continuous bronchodilation. Do not administer other xanthine preparations concurrently. May be contraindicated in peptic ulcer.

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Each 15 ml. contains theophylline (anhydrous) 80 mg.; alcohol 20%

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No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders; athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep addiction-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, lactation or in women of childbearing age requires that potential benefit be weighed against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Employ usual precautions in the severely depressed or in those with latent depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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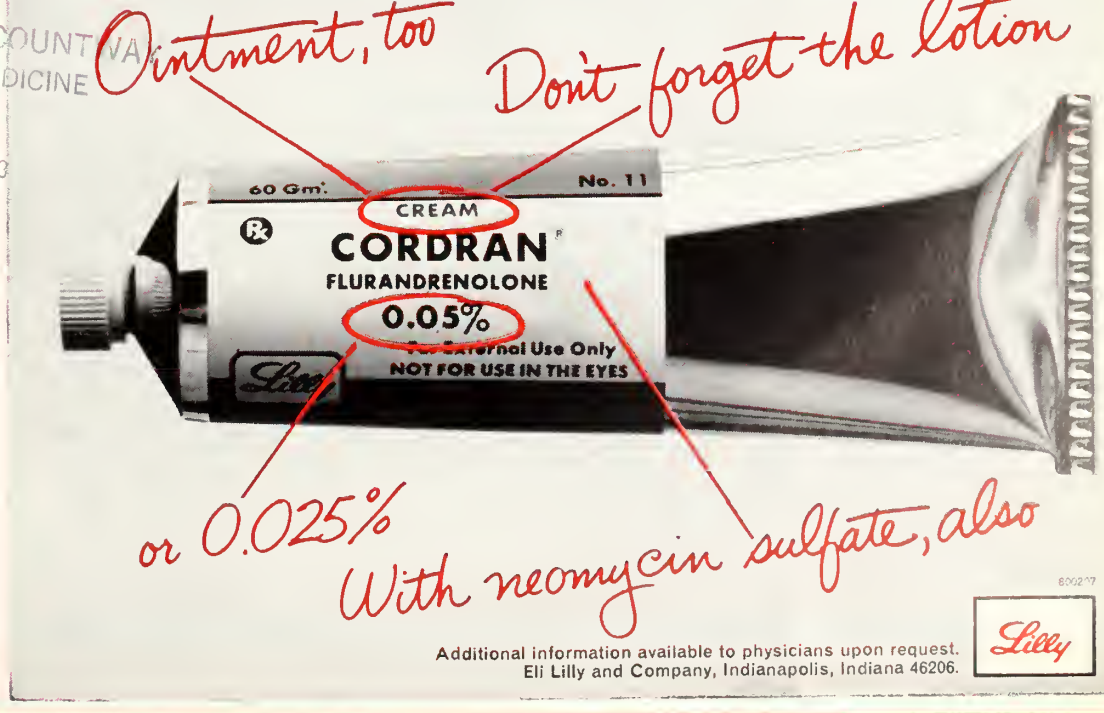
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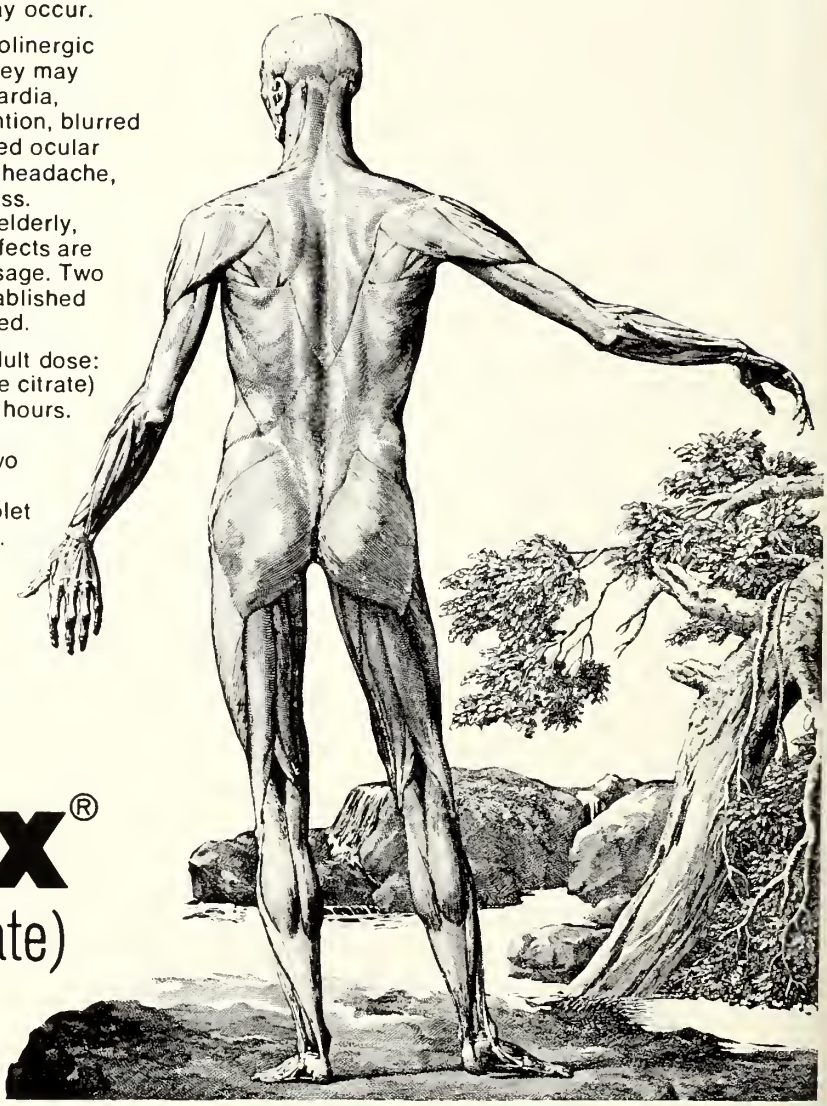
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

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Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

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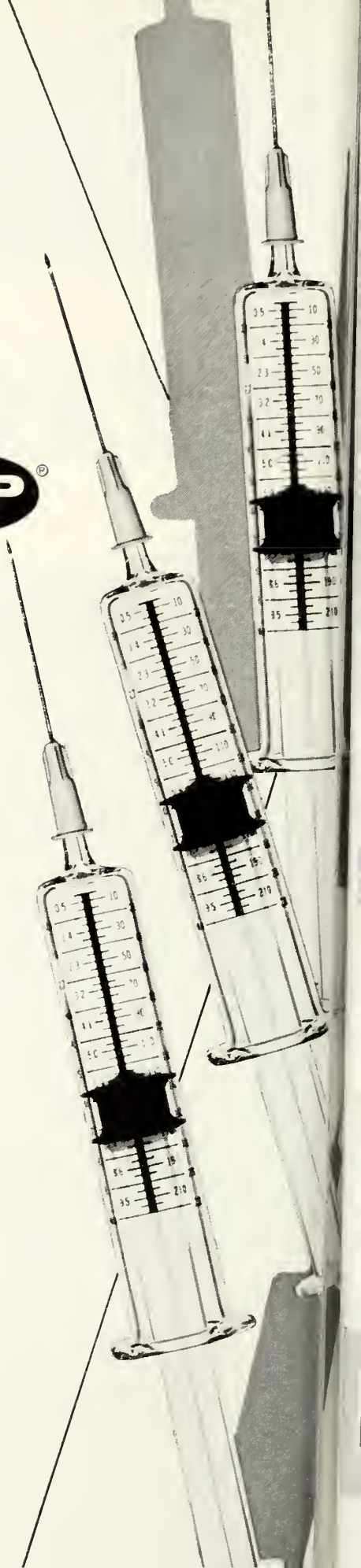
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Relief of neuritic pain from *herpes zoster* (shingles) is prompt[1-3]—usually after the first few intramuscular[2] injections—particularly when therapy is administered early.[3,4] The duration of disability in many patients is often significantly. shortened.[2] Postherpetic neuralgias—even in the elderly—rarely develop.[1,4] Complete pain relief is observed in most patients within 5 days.[2]

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References

1 Combes, F. C. and Canizares, O.: *New York State J. Med.* 52:706-708 (Mar. 15) 1952.
2. Xander, G. W.: *Western Med.* 1:14 (Sept.) 1960.
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Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics. etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug.

804438R

ABBOTT

TM-TRADEMARK



MORNING STIFFNESS EASED LAST NIGHT

(She took Persistin® instead of aspirin)

Persistin treats marning stiffness and pain the night before.

Persistin is a unique salicylate which combines the prompt analgesic action of aspirin to encourage early sleep with the proven, persistent action of salicylsalicylic acid to permit uninterrupted sleep. Three Persistin tablets at bedtime yield therapeutic serum salicylate levels on arising which are well within the range of effective salicylate therapy for the relief of pain and stiffness in arthritis.

Thus, therapy with Persistin allows many arthritics to dress more quickly and easily, and face the morning optimistically.

Persistin is also valuable for *day-long control* of the pain and discomfort of arthritis.

DOSAGE: *To relieve morning stiffness and pain:* when salicylates have not been taken during the day, an adult dose of three tablets at bedtime is suggested.

For 24-haur control of pain: Adults up to 160 lbs., one tablet after each meal and one at bedtime. Adults over 160 lbs., one tablet after each meal and two at bedtime.

PRECAUTION: Other salicylates should not be taken concurrently. Do not exceed recommended doses.

PERSISTIN

salicylsalicylic acid 7½ gr. (485 mg.)—aspirin 2½ gr. (160 mg.)

SHERMAN
LABORATORIES, INC.
Detroit, Michigan 48211

The AMBAR SCRAPBOOK of Obesity Oddities
FACT & LEGEND



NTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

Ambar Extentab before breakfast can control most patients' appetite for up 2 hours. Methamphetamine, the appe- suppressant, gently elevates mood and s overcome dieting frustrations. Pheno- ital, the sedative in Ambar, controls irritability and ety...helps maintain a state of mental calm and equa- ty. Both work together to ease the tensions that erode villpower during periods of dieting.

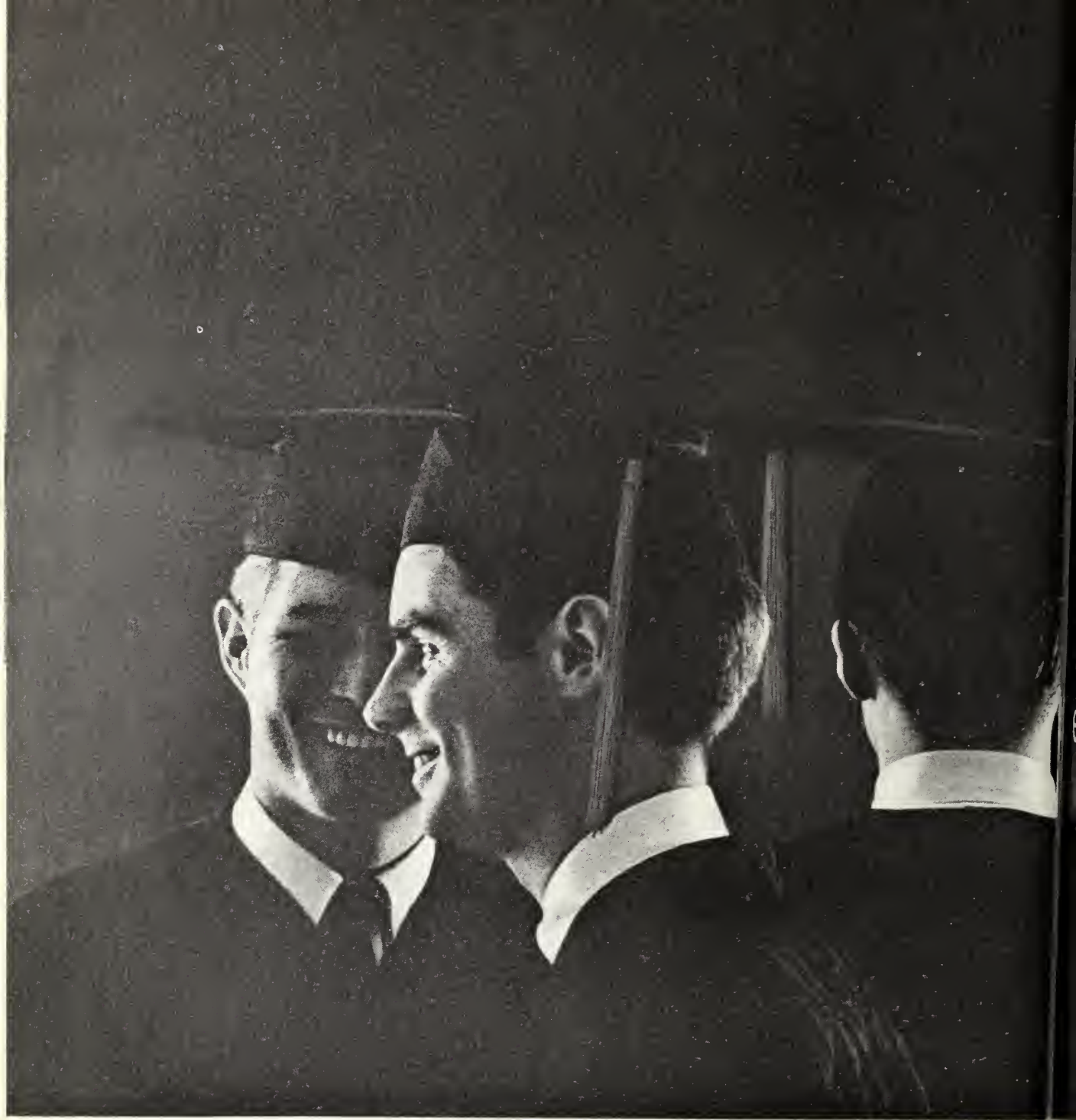
available: Ambar #1 Extentabs®—methamphetamine ochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warn- may be habit forming).

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

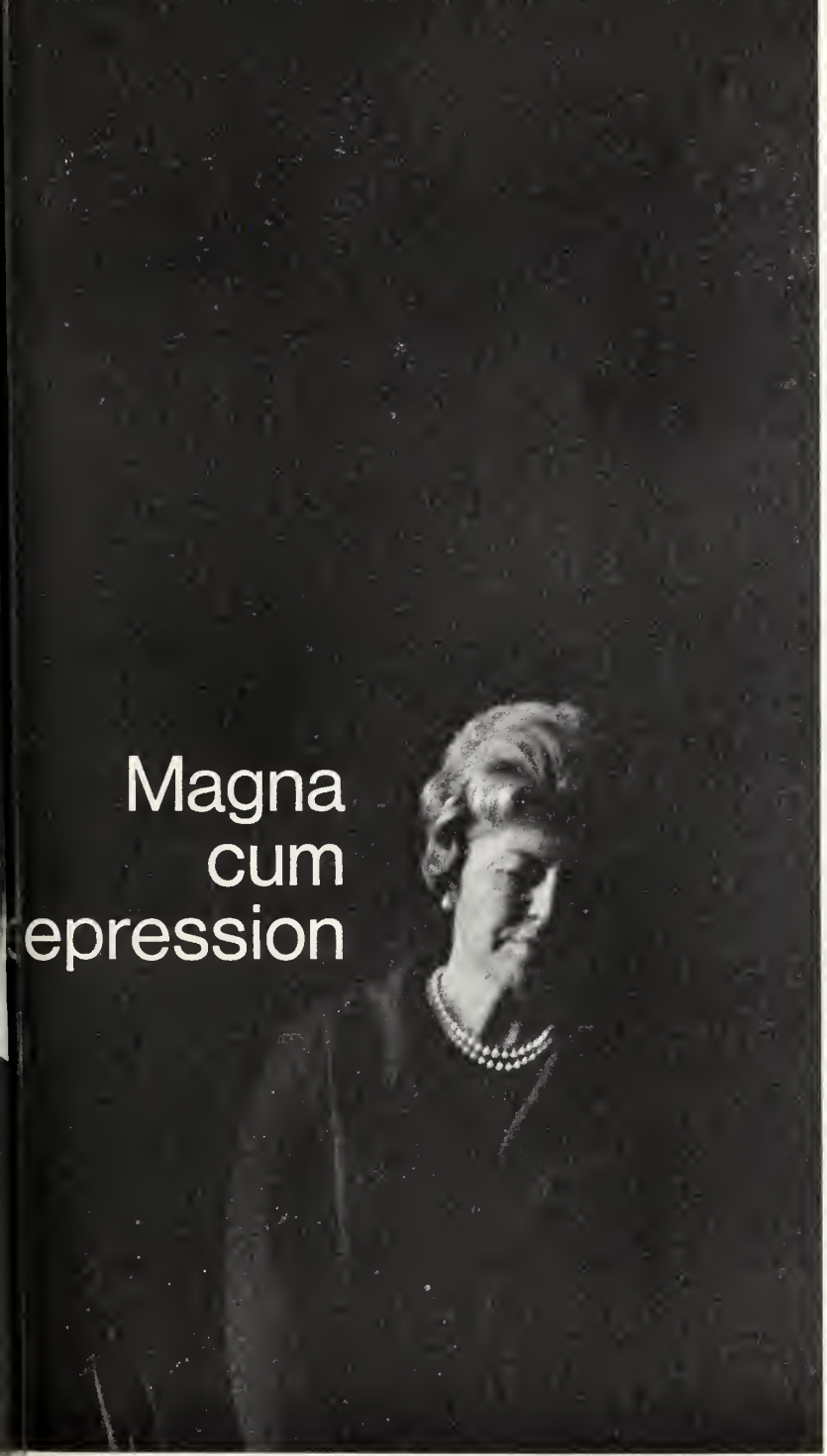
BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220 A·H·ROBINS



Tofranil®, imipramine hydrochloride

Indications: Tofranil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, it should not be used during the first trimester of pregnancy. Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy. Because of its anticholinergic effect, caution should be observed in prescribing the drug for patients with increased intraocular pressure.
In rare instances, transient cardiac arrhythmias have occurred in hyperthyroid patients and in patients ceiving thyroid medication whe this compound was added to th regimen.
Imipramine may block the phar cologic activity of guanethidin and other related adrenergic neuro blocking agents.
The drug is not recommended present time in patients under of age.
Adverse Reactions: Dryness of mouth, tachycardia, constipati turbances of accommodation, ing, dizziness, weight gain, uri frequency or retention, nausea vomiting, peripheral neuritis, parkinson-like syndrome, trem rare cases of falling in elderly tients, confusional states (with symptoms as hallucinations a orientation), activation of psyc schizophrenics and agitation ing hypomanic and manic epis which may require dosage re



For him, commencement.

For his mother, the beginning of his career may seem the end of hers. The end of feeling needed and useful. The beginning, perhaps, of a pathological depression.

Tofrānil can often relieve the symptoms of her depression. If it can relieve her mental anguish, you may be able to help her graduate into a new and fruitful life of her own.

Tofrānil could be her commencement, too.

Tofrānil® Geigy
imipramine hydrochloride

in depression

The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated.

In patients with cardiovascular disease, hyperthyroidism or increased intraocular pressure; in those receiving anticholinergics (including antiparkinsonism agents), thyroid medication or adrenergic neuron-blocking antihypertensive agents; and in those in the first trimester of pregnancy, the precautions discussed in the Prescribing Information should be carefully observed. Although toxic reactions severe enough to require discontinuation of Tofrānil are uncommon, please refer to the Prescribing Information for a description of such instances when discontinuation may be necessary.

...or addition of a tranquilizer or ...porary discontinuation of the drug, ...eptiform seizures, orthostatic ...tension and substantial blood ...sure fall in hypertensive patients, ...ura, transient jaundice, bone mar... ...depression including agranulocy..., sensitization and skin rash ...uding photosensitization, eosino...a, and mild withdrawal symptoms ...udden discontinuation after pro...ed treatment with high doses. ...asional hormonal effects (im...nce, decreased libido, and estro...c effects) may be observed. ...pine-like effects may be more ...ounced (e.g. paralytic ileus) in ...eptible patients and in those ...g anticholinergic agents (includ... ...ntiparkinsonism drugs). ...*atient Adult Dosage:* Initially, ...g. daily, increased, if necessary, ...0 or 200 mg. Maintenance dosage ...be lower, 50 to 150 mg. daily, if ...ible.

Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
(B)R-46-850-C

For complete details, please refer to the full Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

Open-eyed nights





Too tense to sleep...too tired to get up. Early to bed, late to rise, and not much sleep at that, the patient with severe psychic tension is understandably tired. His tensions and overreactions to the day's stresses may interfere with proper sleep, and his inability to face the day's activities can produce an ever-worsening pattern. By relieving psychic tension, Valium® (diazepam) facilitates sleep, particularly with an h.s. dose. In many patients, the usefulness of Valium has been demonstrated in relieving psychic tension alone or with secondary depressive symptoms. Valium is generally well tolerated and, with proper maintenance dosage, usually does not unduly impair mental acuity or ability.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders; athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep addiction-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, lactation or in women of childbearing age requires that potential benefit be weighed against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Employ usual precautions in the severely depressed or in those with latent depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50, 100 and 500.

ROCHE® LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Valium®(diazepam)

useful for the relief of psychic tension, alone or with associated depressive symptoms



in the bronchitis-emphysema syndrome ...bronchodilation without pressor effects

Most bronchodilators for use in pulmonary emphysema contain ephedrine-like drugs. ELIXOPHYLLIN® never did. So, ELIXOPHYLLIN will not cause tachycardia, palpitations, nervousness, insomnia, or other undesirable side effects of ephedrine-like products. Even patients with hypertension, cardiac insufficiency, hyperthyroidism, prostate hypertrophy and glaucoma can take ELIXOPHYLLIN.

Other advantages of ELIXOPHYLLIN: rapid and sustained bronchodilation • proven increase in pulmonary function • adrenergic abuse eliminated.

ELIXOPHYLLIN is theophylline in free and soluble form—resulting in rapid and dependable absorption with less risk of gastric irritation.

Adult maintenance dosage in bronchitis and pulmonary emphysema: one ounce (30 ml.) t.i.d. on arising, at 3 P.M., and on retiring. Adjust dosage to patient response. This average dosage provides continuous bronchodilation. Do not administer other xanthine preparations concurrently. May be contraindicated in peptic ulcer.

ELIXOPHYLLIN®

Each 15 ml. contains theophylline (anhydrous) 80 mg.; alcohol 20%

SHERMAN
LABORATORIES, INC.
Detroit, Michigan 48211



Photo professionally posed.

No injection after all!

This penicillin produces high, fast levels—orally.

Pen•Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

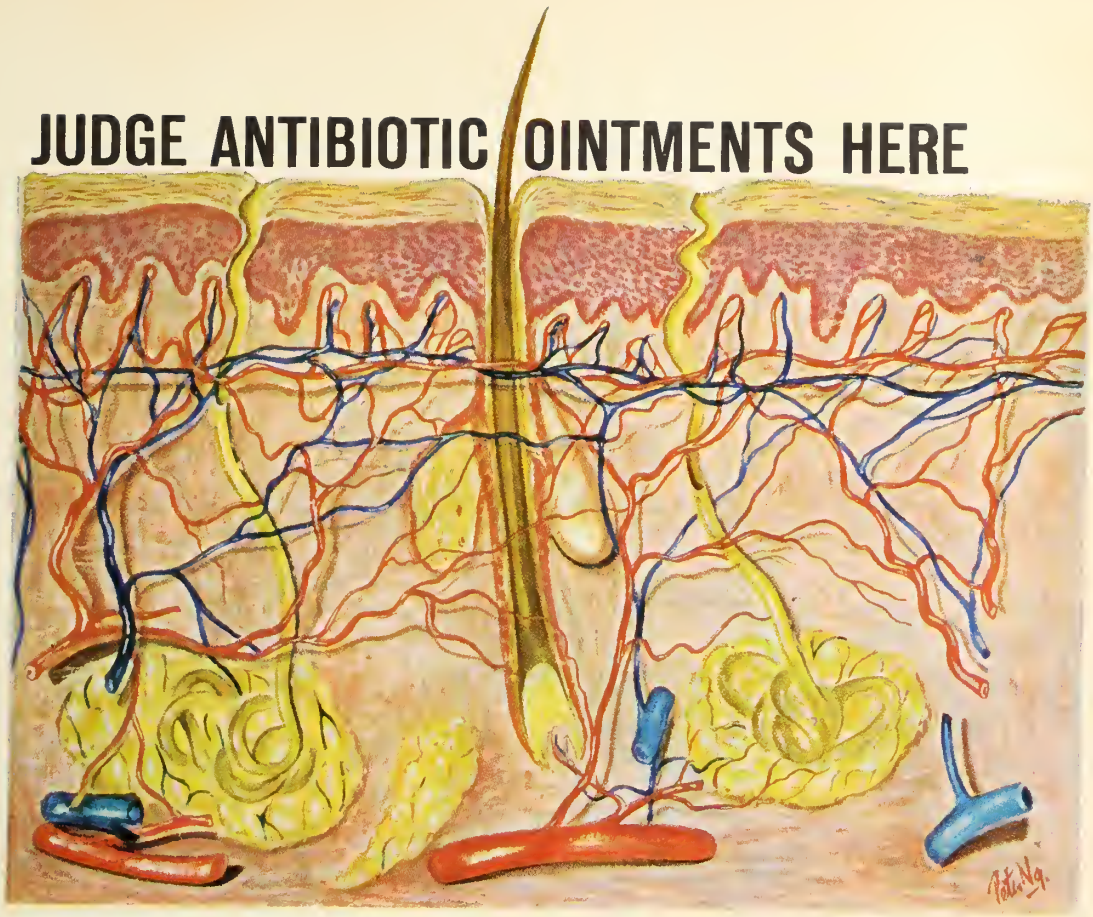
Indications: Infections susceptible to oral penicillin G; prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN•VEE® K**

(potassium phenoxymethyl penicillin) Wyeth

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.
Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

New

Therapeutic breakthrough in non-narcotic control of the pain of

Tegretol®
carbamazepine

trigeminal neuralgia

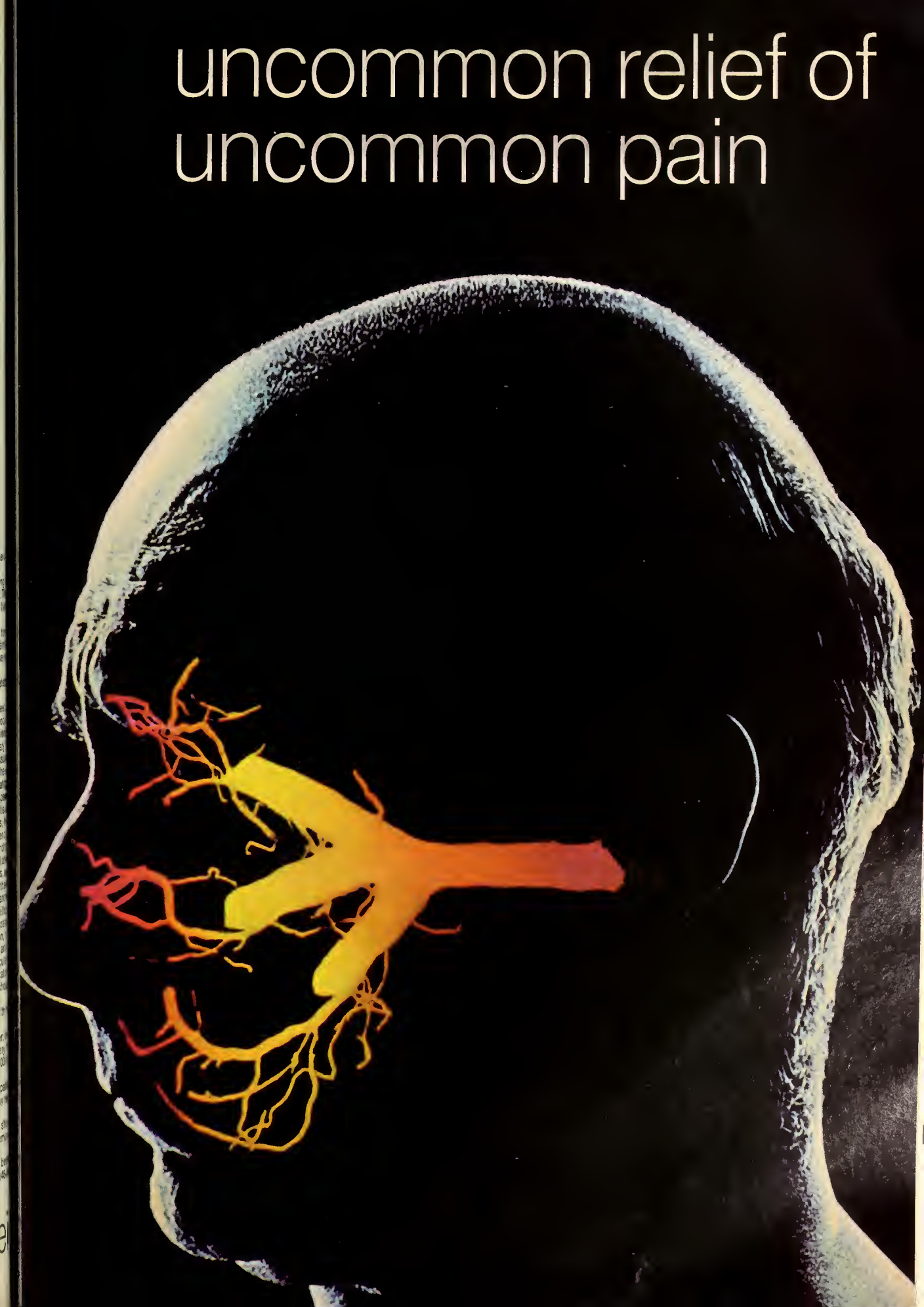
Warning
Fatal cases of aplastic anemia have been reported following treatment with Tegretol. Agranulocytosis, thrombocytopenia and transitory leukopenia have also been observed.
Complete blood and platelet counts should be done prior to and at regular intervals during treatment with the drug (see recommendations under "Important Note and Precautions") to help in the early detection of serious bone marrow injury. Abnormalities in initial blood tests should rule out use of the drug. Also, patients should be made aware of such early toxic signs of a potential hematologic problem as fever, sore throat, mouth ulcers, easy bruising and petechial or purpuric hemorrhage. Should such signs appear, the patient should be advised to discontinue the drug and to report to the physician immediately.

Indication Tegretol is indicated in the treatment of the pain associated with true trigeminal neuralgia. It is not a simple analgesic and should never be administered for relief of trivial facial aches or pains.
Contraindication Do not use in those with a known sensitivity to any tricyclic compound or in those being treated with M.A.O.I. agents. As long a period as possible should elapse before using Tegretol in patients who have been treated with M.A.O.I.'s, with a minimum of 7 days. In such cases, initial dosage should be low and the patient's reaction to gradual increments closely observed.
Important Note and Precautions Familiarity with the clinical symptoms which lead to an accurate diagnosis of true trigeminal neuralgia and with the complete prescribing information, careful patient selection, a thorough examination before treatment and close patient supervision throughout the treatment period are essential to the safe and effective use of this drug.
Where feasible, Tegretol should not be used in conjunction with any potent drug which may increase the possibility of toxic reactions.
In pregnancy, the drug should not be prescribed during the first trimester and thereafter only to patients in whom the clinical situation warrants the potential risk. It should not be administered to nursing mothers.
Patients with increased intraocular pressure should be closely observed during treatment with this drug because of its anticholinergic effect.
Because of the drug's relationship to other tricyclic compounds, the possibility of activation of latent psychosis and, in the elderly, of confusion or agitation, should be considered.
Dizziness and drowsiness may occur and patients should be cautioned about the hazards of operating machinery or automobiles and of engaging in other hazardous tasks.
Use cautiously in patients with a history of coronary artery disease, organic heart disease, congestive failure or liver disease.
Before initiating therapy, the following laboratory procedures should be performed:
1. Complete blood and platelet counts which, if abnormal, should rule out the use of the drug.
2. Baseline evaluations of liver function.
During treatment with Tegretol, the following laboratory procedures should be performed:
1. Complete blood and platelet counts should be done at intervals of one week during the first month of drug treatment, every two weeks during the second and third months, and at monthly intervals thereafter for as long as the patient is taking the drug. A trend toward a decreasing white blood cell count should suggest a dosage reduction and more frequent laboratory and clinical evaluations. Should this trend continue, the dru should be discontinued.
2. Liver function tests must be performed at regular intervals during tre ment with this drug since liver damage may occur during therapy. The drug should be discontinued immediately in cases of aggravated liver dysfunction or active liver disease.
3. Periodic eye examinations, including slit-lamp, funduscopy and tonor etry, are recommended for patients being treated with this drug since many phenothiazines and related drugs have been shown to cause eye changes.
4. Complete urinalysis and BUN should be done on patients treated v Tegretol because of observed renal dysfunction.
Adverse Reactions Dizziness, drowsiness, unsteadiness on the feet, nausea, vomiting, aplastic anemia, transitory leukopenia, agranulocyto eosinophilia, leukocytosis, thrombocytopenia, purpura, abnormalities i liver function tests, cholestatic and hepatocellular jaundice, urinary fre quency, acute urinary retention, oliguria with elevated blood pressure, albuminuria, glycosuria, elevated BUN, microscopic deposits in the uri impotence, disturbances of coordination, confusion, headache, fatigue blurred vision, transient diplopia and oculomotor disturbances, speech disturbances, abnormal involuntary movements, peripheral neuritis an paresthesias, depression with agitation, talkativeness, nystagmus, tin- nitus, paralysis and other symptoms of cerebral arterial insufficiency, pruritic and erythematous rashes, urticaria, Stevens-Johnson syndrom photosensitivity reactions, alterations in skin pigmentation, exfoliative dermatitis, alopecia, diaphoresis, recurrence of thrombophlebitis, ery multiforme and nodosum, aggravation of disseminated lupus erythema tosus, gastric distress, abdominal pain, diarrhea, constipation, anore: dryness of the mouth and pharynx, glossitis, stomatitis, fever, chills, adenopathy, lymphadenopathy, aching joints and muscles, leg cramp: conjunctivitis, left ventricular failure, aggravation of hypertension, hyp tension, syncope and collapse, edema, aggravation of coronary artery disease and congestive heart failure. (Whether these cardiovascular e are drug-related is not known. However, some of these complications resulted in fatalities.) The necessity for discontinuing the drug should dictated by the gravity and severity of the adverse reactions.
Dosage and Administration The drug should always be taken with me if possible.
Initial: One-half tablet (100 mg.) b.i.d. on the first day. Thereafter, the should be increased in one-half tablet (100 mg.) increments every 12 until freedom from pain is achieved. To relieve pain, between 200 mg 1200 mg. per 24 hours may be necessary.
Maintenance: Initial control of pain can be maintained in most patien with a dose of 400 mg. to 800 mg. daily. Maintenance doses may rang between 200 mg. and 1200 mg. daily.
At least once every 3 months during treatment period attempts shoul made to discontinue the drug or to reduce the dose to the minimum effective level.
Availability Round, white, single-scored tablets of 200 mg. in bottle of 100 and 1000. (B)46-82
For complete details, please see Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

Geig

uncommon relief of uncommon pain





A little

Just one 50 or 100 mg.
tablet in the morning c
work a long diuretic da
in edema and hyperten on.

HY-611



ygroton® can work a long day too

orthalidone

because of its prolonged
n, usually providing smooth
rtic activity throughout the day.
ne-a-day dosage, in the
un, means few tablets to take
w tablets to pay for.

Hygroton, brand of chlorthalidone, may mean troublesome side effects for certain patients. And you can't prescribe it in cases of demonstrated hypersensitivity to the drug or in severe renal or hepatic diseases.

Before writing it for your patients, please check the Prescribing Information. It's summarized on the next page.

ygroton

orthalidone in edema and hypertension

Geigy



in edema and hypertension

A little Hygroton® can work a long day

chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant patients. Since the drug may cross the placental barrier, adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, hyperuricemia, headache, muscle cramps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000.

(B)R2-46-230-D

For full details, please see the complete prescribing information.

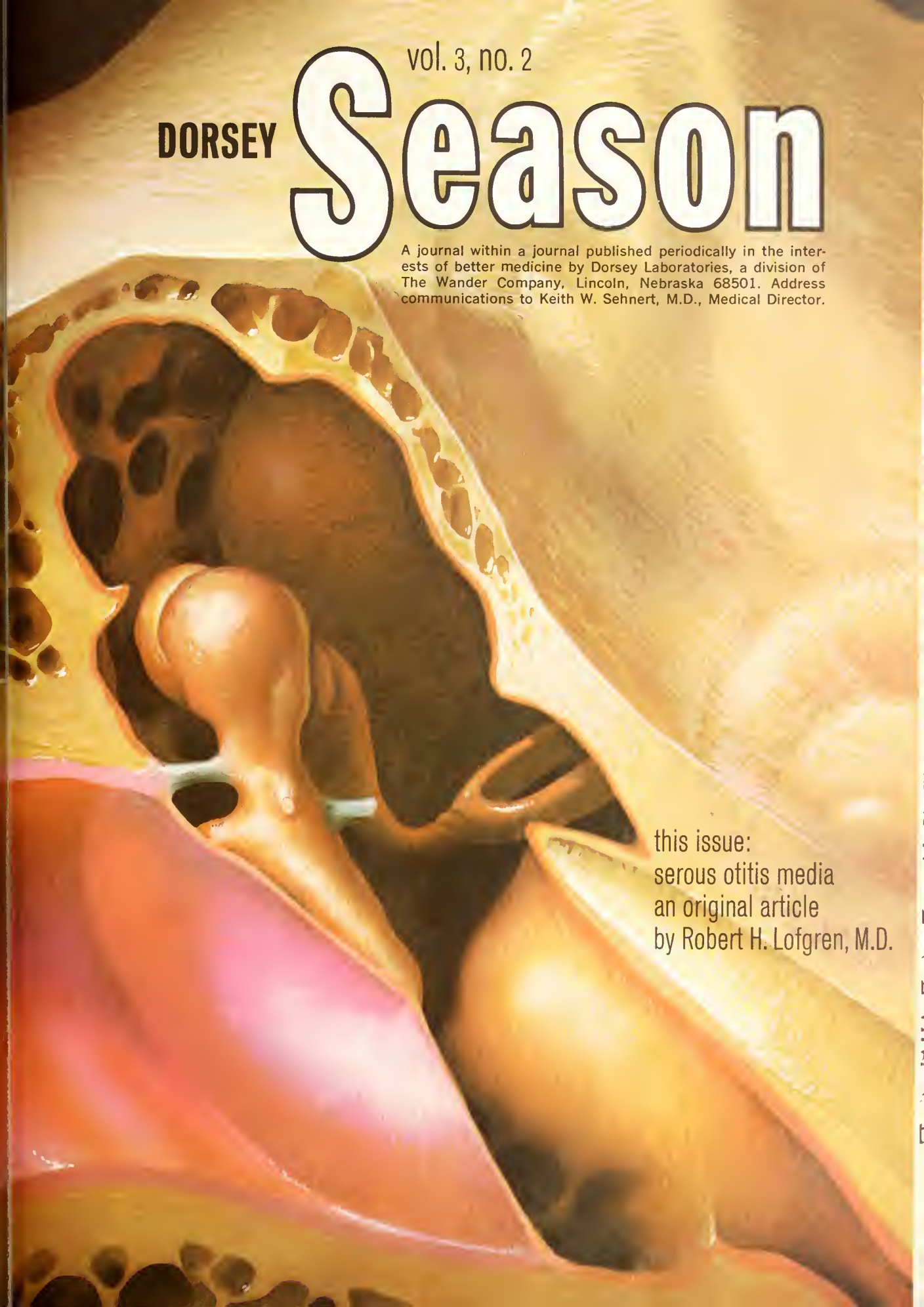
Geigy

Geigy Pharmaceuticals
Division of
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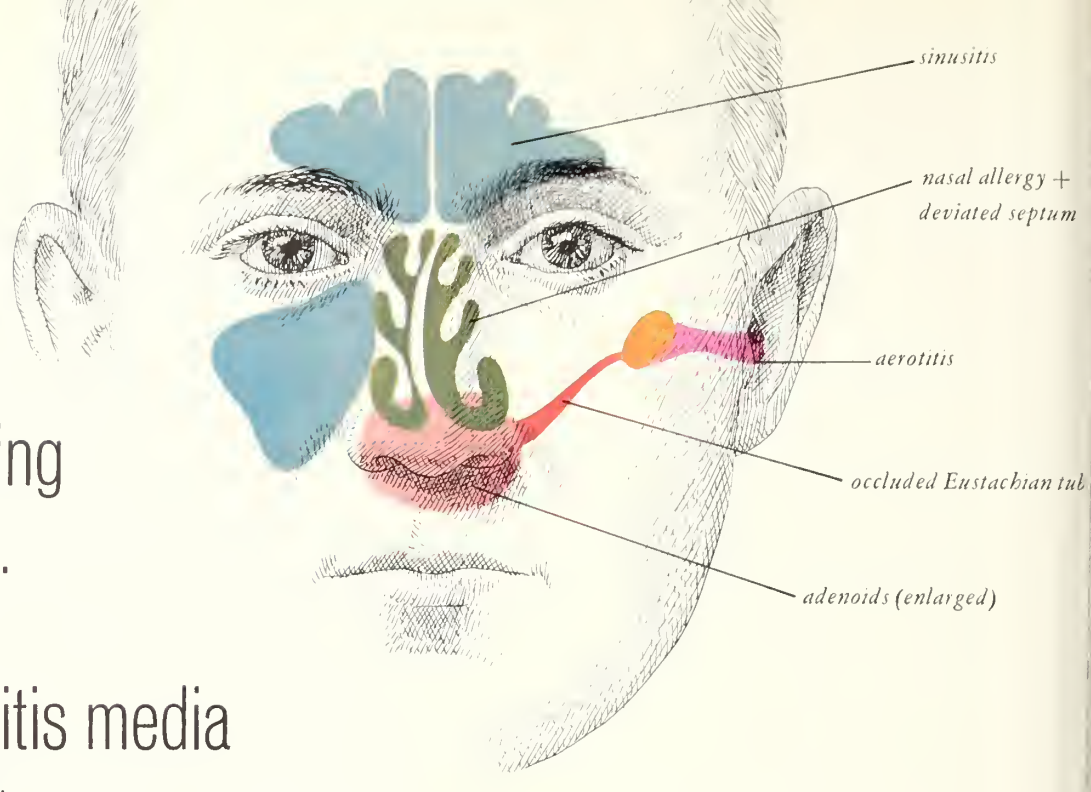
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this issue:
serous otitis media
an original article
by Robert H. Lofgren, M.D.



the complaining earache... key to serous otitis media

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Serous otitis media is probably the most common ear problem in children, especially in the wintertime. Diagnosis is usually easy in adults, but may be quite difficult in children, especially the very young child where one has to depend almost entirely on the physical findings.

The symptoms of serous otitis are a fullness in the ear, a mild hearing loss and mild earache. The earache can best be described as a "complaining earache" instead of a "screaming earache" as found in purulent otitis media. A young child may be irritable and pull at the ear. In milder cases, and as the ear recovers, gurgling and popping noises can be heard in the ear.

On examination one may see a yellow tympanic membrane and if a fluid level is present the diagnosis becomes easy. However, the eardrum may be dull gray, or slightly pink, or even perfectly normal. Pneumomassage using a Siegle otoscope or a closed-head electric otoscope must be done on both ears, otherwise the diagnosis will be frequently missed. Attempted movement of the drum with the pneumatic otoscope produces either a sluggish motion of the drum or no motion at all instead of the easily movable normal drum. The Rinne test is negative and there is a 15-20 decibel conductive hearing loss. The bone conduction may be better than normal and an air-bone gap may exist even with the air conduction within normal limits. Occasionally one finds a false nerve deafness on the audiogram when thick glue-like fluid causes immobility of both the oval and round window. Both conditions return to normal when the fluid is removed, but they make the interpretation of screening audiograms very difficult.

There is no single cause for serous otitis. One factor always present is blockage of the eustachian tube, but this alone is not enough to produce fluid. There must also be an inflammatory reaction. Blockage of the eustachian tube may be caused by many conditions. In children the most common cause is enlarged adenoids. In the summer the next most common cause is allergy. Upper respiratory infections or influenza are common causes in the winter. Nasal allergy, acute and chronic sinusitis, nasal septal deformity and cleft palate can all cause eustachian tube obstruction. Some children may have a congenitally small eustachian tube, but fortunately they usually "grow out of the problem."

The first sign of a nasopharyngeal tumor is often a serous otitis. One must always rule this out in any adult who later in life develops repeated or persisting serous otitis. Causes sometimes overlooked are nasogastric tubes after surgery, simple obesity and cardiorenal disease, which may produce congestion in the mucosal lining of the eustachian tube. In recent years we have been seeing a new cause—acute otitis media, where the patient is adequately treated with antibiotics but where drainage has not been

established either through the eardrum or down the eustachian tube. A sterile exudate is left in the middle ear.

The inflammatory response may be caused by a marked negative pressure as in air otitis from flying, or it may be from a mild bacterial or viral infection in the middle ear. Serous fluid is a good culture medium and will frequently go on to purulent otitis media, especially if the original blockage was caused by an infectious process such as acute rhinitis or adenoiditis. When the infection heals there may be scarring in the middle ear mucosa. Mucous glands develop in this tissue and pour out a thick mucoid material. This ear usually looks normal until a pneumatic otoscope is used. The objectives in treating serous otitis are to remove the obstructing agent and to provide drainage from the middle ear. Often this can be accomplished by decongestants and nose drops. If large obstructing adenoids are present they should be removed. Sinusitis should be treated with oral decongestants or nose drops, plus antibiotics where indicated. Nasopharyngeal tumors should be treated. Allergies should be treated with antihistamines and, where indicated, by desensitization.

If the fluid does not clear with medical treatment within a week or two, a myringotomy should be done. If there is a question of active infection or if the fluid looks purulent, as is seen at the conclusion of acute otitis, cultures are taken. On adults this can be done in the office without anesthesia. It is no more painful than an intravenous needle for a blood test. A good safe topical anesthetic has a tremendous psychological value to the patient. Children under the age of 1 require no anesthesia. Between the ages of 1 and 3 anesthesia is not absolutely essential although a general anesthetic may be used to avoid the child's possible mistrust at follow-up examinations. I usually do the myringotomy at the same time as the adenoidectomy if the adenoids are enlarged. Once drainage has been established with decongestants or by myringotomy, positive pressure inflation of the middle ear is invaluable in forcing out the serous fluid and keeping it from reforming. The patient can do this himself by performing the Valsalva maneuver. This should be done several times a day, by taking a deep breath, holding the nose and blowing hard against the closed lips for a second or two.

In resistant cases where the fluid reforms as soon as the myringotomy heals, small polyethylene tubes are inserted through the myringotomy site. Insertion of the tubes, even in adults, usually requires an anesthetic. Good anesthesia can be obtained by infiltrating the canal wall with a local anesthetic, using a #27 needle. Once inserted the patient has no sensation of the tubes' presence. Be careful to caution the patient or parents not to allow any water to get into the ear canal while a myringotomy is open or a tube is in place. Water can be kept out by a pledget of lamb's wool in the ear canal or a cotton pledget thickly coated on the outside with petroleum jelly. I check these patients a week after a myringotomy to be sure it is healed and at two month intervals until the tubes have fallen out, usually within three to six months after insertion.

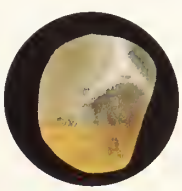
The mucoid type of fluid is so thick and tenacious that it is appropriately called a glue ear. It is aspirated only with difficulty through the eardrum, and occasionally must be removed through a tympanotomy. This thick, glue-like fluid is prone to recur, as the myringotomy usually heals long before the mucous membrane has returned to normal. Repeated myringotomies, as many as ten or twenty, were formerly required for this condition. Now polyethylene tubes are inserted initially when this thick, glue-like material is found. At times a subacute mastoiditis may accompany the serous otitis, which will necessitate a simple mastoidectomy before the condition can be eradicated. Usually the thin serous fluid readily responds to decongestants or to a myringotomy and removal of the eustachian tube obstruction. Occasionally, however, even serous fluid will repeatedly reform. For this, resection of the tympanic plexus of nerves which lies on the promontory of the middle ear has been carried out, as the tympanic branch of the glossopharyngeal nerve is the secretomotor nerve to the ear.

Failure to diagnose serous otitis is the most common cause of the recurrent, almost continuous otitis me-

Otoscopic Views



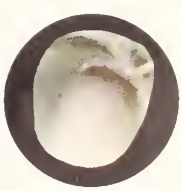
Normal



Acute Serous



Acute Purulent



Chronic Serous

dia seen in young children. In these cases a myringotomy will frequently provide a long-term cure without adenoidectomy or any other surgery. Failure to do this may allow the condition to go on to acute or subacute mastoiditis. Adhesive otitis media with scar tissue binding down the ossicles or tympanosclerosis may also result with permanent impairment of hearing. The prognosis for hearing with adhesive otitis or tympanosclerosis is usually poor. If the adhesions are removed, they reform, and the same is frequently true of tympanosclerosis even after a tympanoplasty. For many of these people a hearing aid is the only solution. The constant negative pressure in long standing serous otitis media may draw in either Schrapnell's membrane or the posterior superior portion of the eardrum forming a pocket to cause a chronic otitis media with cholesteatoma, which may not become apparent until twenty or thirty years later.

The non-medical complications of improper diagnosis or treatment may be even more serious. The irritable child, the frequent bouts of acute purulent otitis media with pain and fever, the expense of antibiotics and doctors, and the time lost from school or work affect the entire family.

In summary, serous otitis has many causes. There is a blocking of the eustachian tube and an inflammatory reaction in the middle ear mucosa, the latter usually caused by a mild infection. The treatment is to provide immediate drainage by decongestants and where necessary, by a myringotomy. The obstructing agent must be removed by surgery if it is adenoid or by oral decongestants, and antihistamines or nasal spray if it is an upper respiratory infection or allergy. Occasionally resistant cases require plastic tubes placed through the eardrum or other more radical surgery. Failure to treat properly leads to hearing loss which may be permanent, repeated acute otitis media or possibly even chronic otitis media with cholesteatoma.

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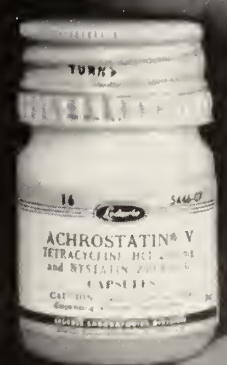
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DROWNING: RESUSCITATION AND DEFINITIVE TREATMENT

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Baltimore, Maryland

Six thousand people die each year in the United States as the result of drowning. Most of them are young and in good health. One state reported 442 drownings in a year, half of them in people under 24 years old. In this age group, no other disease accounted for as many deaths.[1] Yet relatively little is known about this costly killer.

Pathophysiology

Postmortem examination of drowning victims usually shows a striking light pink coloration of the skin suggestive of carbon monoxide poisoning. Goose flesh is often seen. Frothy pulmonary edema fluid may fill the lungs and airway and exude from the nose and mouth. The lungs appear hyperexpanded, and petechial subpleural hemorrhages are common. Microscopic examination may reveal seaweed, sand, mud or algae. There is diffuse capillary congestion of the alveolar walls. The upper gastrointestinal tract may be filled with ingested fluid and foreign material. Biochemical and morphologic alterations in the blood may be discovered. These changes are only suggestive of the drastic physiologic alterations which precede death.

Experimental evidence indicates that submersion is followed by a period of breath-holding[2] and struggling of markedly variable duration. This is followed by swallowing of large volumes of water and vomiting. Laryngospasm may prevent flooding of the lungs until asphyxia produces flaccidity. Some victims die during this phase, before water enters the lungs. Once asphyxia becomes so profound that the victim's glottic muscles relax, subsequent events are determined by the composition of the fluid which floods the lungs.

In fresh water drowning, large volumes of water pass through the lungs into circulation with extreme rapidity (Fig. 1). There is evidence that the circulating blood volume may be doubled within 2 minutes.[3] This marked hemodilution results in massive hemolysis and lowering of blood concentrations of sodium, chloride, calcium and plasma proteins. Often the combination of hypoxia and relative hyponatremia from the hemodilution leads to sudden ventricular fibrillation as the cause of death. If fibrillation does not occur, or if it is corrected, the massive hypervolemia results in fulminating pulmonary edema and heart failure.

Sea water contains 3.5% mixed salts and consequently is markedly hypertonic compared to blood. When sea water is aspirated, these salts diffuse into the blood with rapid elevation of the plasma sodium

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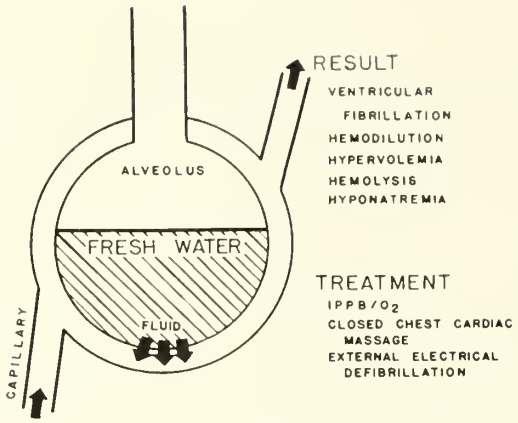


Figure 1

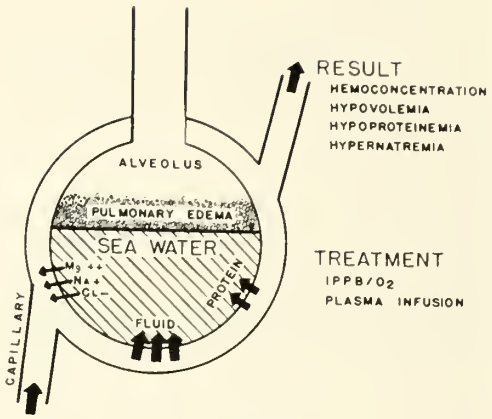


Figure 2

(Fig. 2). The osmotic effect of the sea water causes loss of large amounts of fluid from the circulation into the lungs. As the alveolar membrane is damaged, plasma protein is also lost into the lung fluid. The end result is a fulminating pulmonary edema, hypotension, bradycardia and death.

Resuscitation

Most victims of submersion will either survive spontaneously, not having been submerged so long that resuscitation is necessary, or will be beyond any help. Resuscitation and subsequent definitive treatment, then, are aimed at one zone in a wide spectrum of rapidly changing physiologic events. It must always be remembered that the apparent duration of submersion is an unreliable guide to the physiologic condition of the victim.

As soon as a victim is recovered after submersion, breathing movements should be checked. If breathing movements and coughing are vigorous, it is likely that hypoxic damage is slight and that little water has been aspirated. If no cyanosis is observed and the patient is conscious, he should be transported to a hospital for physical examination, chest x-ray film, and examination of blood and urine.

If there are no breathing movements, time must not be wasted. No attempt should be made to drain water from the lungs since this cannot be accomplished effectively.[4] The pharynx should quickly be cleared by the rescuer's fingers and exhaled air resuscitation started immediately. The lungs can be ventilated by blowing through fluid which may be in the airway. Immediately after the first successful lung inflation, the pulse in the carotid artery should be checked. If it is not palpable, closed chest cardiac massage must be started and continued along with artificial ventilation of the lungs. Intermittent positive pressure breathing with oxygen should be substituted for exhaled air as soon as the necessary equipment becomes available.[5] Both artificial respiration and closed chest cardiac massage must be continued while the victim is transported to a hospital. Cardiac massage may be discontinued if a spontaneous pulse becomes palpable in the carotid. Positive pressure ventilation should not be discontinued even if spontaneous breathing efforts return. In this event, assist the victim's inspiratory efforts with positive pressure oxygen.

Definitive Treatment

In the hospital, if a spontaneous pulse is still not palpable, 1 mg of epinephrine should be injected by the intracardiac or intravenous route. The dose should be reduced for children under 18 months of age. If there is electrocardiographic evi-

dence of ventricular fibrillation, external countershock should be used to correct it.[6] Artifical respiration and circulation should be continued, along with the intravenous administration of peripheral vasoconstrictor drugs such as phenylephrine or methoxamine, until spontaneous circulation is restored.

Then the patient's blood and urine should be examined, a chest x-ray film should be made, and an adequate physical examination performed. Fluid and electrolyte redistribution occurs very rapidly following aspiration of either fresh water or sea water. Blood specimens drawn 30 to 60 minutes after aspiration may reveal little evidence of the magnitude of the physiologic insult. If a serious degree of hemolysis has occurred in victims of fresh water drowning, partial exchange transfusion may be considered. Fluid intake must be regulated to promote urinary output and the complications of aspiration and pulmonary edema must be treated. Following sea water aspiration, administration of plasma may be essential to restore the circulating blood volume. In either type of drowning, monitoring of the central venous pressure provides a minute to minute indication of the effectiveness of treatment.

Although the circulatory changes may be life-threatening in some cases, the most severe problem in the management of any patient who has aspirated large volumes of fluid is arterial hypoxemia and acidosis.[7] Loss or alteration of lung surfactant material, and possibly local parasympathetic reflexes, lead to areas of nonventilated alveoli through which pulmonary blood flow is shunted. Consequently, arterial blood should be drawn for determination of pH, PCO^2 and PO^2 as soon as possible. These determine the need for correction of acidosis by means of bicarbonate administration. They also indicate the need for continued ventilatory support and the oxygen concentration necessary to prevent hypoxia. Bronchodilators may be helpful, and the pneumonitis should be treated with steroids and antibiotics. The patient's progress should be followed by means of serial blood gas determinations. When the pulmonary shunt subsides (usually within 48-72 hours) spontaneous breathing may be permitted, but supplementary oxygen is often still necessary. The inspired oxygen concentration should be reduced as soon as normal arterial PO_2 values can be maintained with lower concentrations.

Management of a patient following resuscitation from circulatory arrest requires a great deal of attention. Often the patient's reflexes are obtunded and circulation and respiration require constant support. Initially, passive hyperventilation may be accomplished through an endotracheal tube to minimize leakage of air and prevent gastric distention. If artificial ventilation is indicated for prolonged periods, the endotracheal tube should be replaced by a tracheostomy. Constant attention is necessary to humidification of the inhaled gas, asepsis during suctioning of secretions, artificial coughing and sighing, and frequent changes in the patient's position. It is desirable to cool the patient to about 32° C body temperature to reduce oxygen consumption and carbon dioxide production. During the process of cooling, shivering must be prevented.

Since cerebral edema often follows asphyxia and circulatory arrest, the resulting increase in intracranial pressure leads to further death of cerebral substance. In addition to respiratory alkalosis from passive hyperventilation, hypothermia, and correction of metabolic acidosis, osmotic diuresis may be desirable to minimize cerebral edema.

Immediately following restoration of circulation, the patient's state of consciousness is the best indication of the success of the resuscitative efort. The earlier reflex activity returns, the more likely is the patient to recover fully. Steadily pro-

gressive lightening of consciousness is encouraging compared to those patients who show plateaus during which no progress is observed. The electroencephalograph may be of assistance in following the course of returning cerebral function.

Although rapid and specialized attention to many facets of care are necessary in the management of the patient subjected to drowning or near-drowning, these efforts can be rewarding. This form of accident has a predilection for the young and healthy. Successful resuscitation gives a high yield of useful lifespan.

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CLINICAL NOTE

HUMAN DIROFILARIASIS

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Charleston, S. C.

In 1915 Matas[1] observed that the W. bancrofti form of human filariasis was endemic in an area near New Orleans, Louisiana. Subsequently a similar report was published by Johnson[2] for the Charleston, South Carolina area, and in 1919 the U. S. Public Health Service in a special study[3] found that 77 out of 400 individuals examined in Charleston, S. C. were infected with this parasite. Sporadically other reports of filariasis were made during the 1920-1930 period with cases being reported elsewhere along the Gulf coast area, Florida, and the Atlantic southeast regions as far north as Washington, D. C. The disease seems to have disappeared in the past 30 years, and in the Charleston, S. C. area no new instances of infection have been observed since the 1940 period, and probably the last individual with residuals of chronic infection was seen in 1948.

Mosquitoes of the common varieties of Culex, Anopholes, and Aedes species are known to transmit W. bancrofti and also several of the other filarial parasites, including the dog heart worm or Dirofilaria immitis and other Dirofilaria which cause widespread enzootic parasitic disease of domestic and wild carnivores, such as dogs, cats, opossums and raccoons. This form of parasitic disease has been found to be endemic throughout the United States.

Since 1952 it has been definitely established that man could be infected with Dirofilaria immitis as well as with some other species of Dirofilaria. In 1957 Faust collected and published the findings in 37 instances of Diroflaria infection in man, including the reports of 4 patients who had acquired their infection in Florida and Louisiana. Instances of human infection locally acquired have now been reported not only in Florida, Louisiana, South Carolina, and most recently, in North Carolina, the first reported instance in that state,[4] but also in such widely

separated areas as in the states of Washington, New York and Massachusetts. Since the review of the known cases of human infection then reported in the world literature by Dr. Faust[5] in 1957, a review of all the recognized and reported cases which have occurred in the United States up to 1966 was published by Beaver and Orihel[5] of Tulane University, in which an additional 35 cases were tabulated, many of which they had identified by review of tissue materials studied by them in their laboratory.

In addition to the recent published report by Brumbach, Morrison and Weatherly[4] of the North Carolinian who had an orbital lesion from Dirofilarial infection, Spear[7] of the University of Miami has reported his experiences with recent cases in which Dirofilaria produced pulmonary infarctions. These were of the Dirofilaria immitis species or the dog "heart worm". He and others have found that the Dirofilaria may lodge in pulmonary arteries causing an infarction similar to that produced by embolization. Some, however, have been found in asymptomatic patients on routine chest x-ray examination. The diagnosis was established at the time of excisional lung biopsy for a probable neoplastic lesion. Unless sections of such lesions are made in the area of arterial blockage by the parasite, older lesions may be misdiagnosed as undifferentiated granulomas.

Currently we are dependent on excisional biopsy for establishment of the diagnosis. Although the parasite may reach adult maturity in man, it apparently has not been found to develop full sexual maturity or to be able to undergo sexual reproduction as in other mammalian carnivores or omnivores. Search of blood smears for microfilaria is therefore of no diagnostic help as it is in the establishing of the diagnosis of W. bancrofti infections. Eosinophilia likewise has not been reported in man.

Currently measures that might control the disease in man and animals appear limited to control of the mosquito vectors. Wild animals serve as an ample reservoir for spread to the domestic carnivores.

Drugs which have been employed to kill the parasites in the heart chambers of dogs have usually induced fatal embolization in the pulmonary arterial bed by masses of dead filaria which may reach several centimeters in length.

Currently this parasitic infection is of interest chiefly as another example of a primary enzootic disease to which man may fall victim. Clinically it is recognized as being the cause of pulmonary lesions which may simulate other more common forms of embolic pulmonary infarctions, or produce asymptomatic x-ray findings of circumscribed lesions resembling pulmonary carcinoma or primary granulomas. Nodular lesions of the skin and involvement of the orbital or ocular tissues have also been frequently reported. As the disease has been more frequently recognized in the past 10 years, it is evident that we may anticipate seeing an increasing number of cases during the seasons when mosquitoes are prevalent. Certainly it would appear that it has become a rather serious menace to household dogs and cat pets in recent years, though currently it remains in the category of a medical curiosity for man.

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PLACENTAL LOCALIZATION USING RISA^{131} WITH ABDOMINAL SECTOR COUNTING.

REPORT OF 7 CASES

ROBERT C. McLANE, M.D.
F. EDWIN ELLISON, JR., M.D.

Third trimester bleeding is potentially hazardous to the affected patient and presents a problem to the obstetrician. There are many causes of this problem and placenta praevia is one of the most common. A definite diagnosis of placenta praevia may be made by intracervical digital examination, but this may precipitate sudden, massive hemorhage and, in cases not at term, may also necessitate premature delivery. Localization of the placenta by a safer method is therefore of importance.

A number of methods for obtaining placental outline have been developed. X-ray placentography, including soft tissue, contrast or displacement techniques is very accurate after the 35th week of gestation but not so accurate prior to that time and the radiation dose is more than with isotope methods.[1] Opacifying the amniotic fluid by means of dye injection through the pregnant uterine wall (amniography) has been shown to localize the placenta accurately but carries with it the risk of infection, induction of premature labor, and a higher radiation dose than with isotope localization.[2] Arterial placentography is probably the most accurate method but requires arterial puncture and the radiation dose is more than with isotope studies.[3] Intravenous placentography is less accurate and requires large amounts of dye injection.[4-7] Thermoplacentography (placental outline by recording of body surface heat) involves no radiation hazard but is experimental and high accuracy has not been consistently obtained.[8] Ultrasonic placentography (placental outline by means of echogram recording) also involves no radiation hazard and is a promising method. There has been a problem, however, in visualizing the posteriorly located placenta but prospects appear good for overcoming this.[9,10] Isotope placentography is probably the most popular current method and the isotopes commonly used are RISA-I^{131}, Cr^{51} labeled erythrocytes or human serum albumin, Tc^{99m} labeled serum albumin, and Tc^{99m} pertechnetate. Depending upon the isotope used the placenta may be outlined by abdominal sector scintillation counting (as described below), dot and photoscanning with a scanner, or by a scintiphotogram with a gamma camera.

Materials and methods

Placental localization studies were done on 7 patients with third trimester bleeding. Five patients were near term, 1 patient was in the 32nd week gestation, and another was in the 34th week. The ages ranged from 18 to 33 years.

The technique used is as follows:[11,12] Lugol's solution is given in a dose of 10 drops three times daily one day prior to and 3 days after the examination. This saturates the fetal and maternal thyroid gland with iodine and considerably minimies any uptake of I^{131}. The patient is placed in the supine position and 5 microcuries of RISA-I^{131} are given intravenously. Ten minutes are allowed for the tracer to mix with the maternal cardiovascular circulation. The gravid abdomen is divided into 16 equal areas as indicated in Figure 1. In order to determine anterior and posterior location of the placenta a

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horizontal line is drawn on the lateral wall of the abdomen through the level of the anterior superor iliac spine, dividing the abdomen into an anterior and posterior field. One count is taken above and one count below this line at the level of the umbilicus and on both sides of the abdomen. One minute counts are made with a scintillation counter using a 3 x 2 inch shielded colimated sodium iodide crystal over the abdominal areas as well as over the heart. These counts are recorded on the diagram as shown in figure 1 and may be expressed as a percentage of the heart count. Localization is determined by noting the zones with the highest counts. In the case of term or near term pregnancy two of the four zones will be found to contain the highest counts. If the placenta covers a lateral wall it may occupy three zones. If the uterus is only at the level of the umbilicus, the placental site is usually confined to a portion of one zone.

Results

Placental localization was predicted correctly in all seven patients. Five patients delivered vaginally near term, 1 patient delivered vaginally at 32 weeks gestation, and 1 patient had cesarean section at 34 weeks gestation. The diagnoses were confirmed by manual examination of the uterus in cases of vaginal delivery and visual inspection in the case of cesarean section.

Discussion

Placental localization by isotopic methods does not usually cause difficulties in interpretation. The theoretical basis for use of isotopes is that the placenta is physiologically a blood pool which accumulates isotopically labelled blood components to a greater degree than the surrounding less vascular structures. Interpretation of the results depends upon demonstration of high count rates over the site of placental implantation. When the

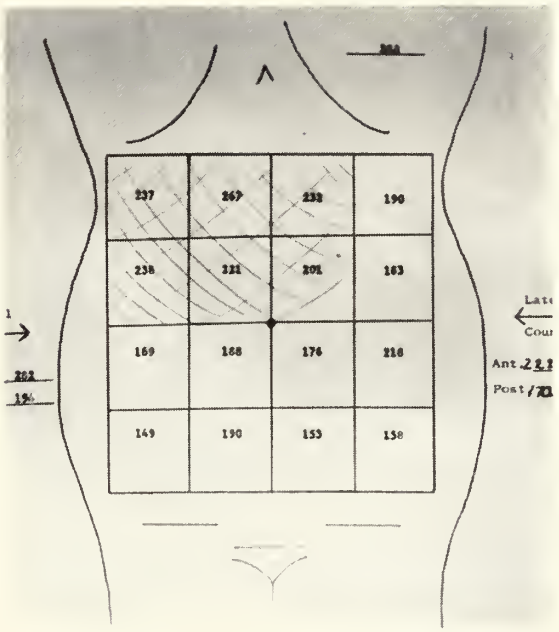


Fig. 1. Form used to record abdominal sector counts and illustration of a case of placental localization to the right upper uterus, anterior wall.

placenta is situated on the anterior wall of the uterus its site is indicated by a rate of activity almost equal to that over the heart. When the placenta is posteriorly situated there is usually found a homogeneous distribution over the abdomen with somewhat higher lateral readings. A difficulty in interpretation may arise when the placenta is localized to the lower uterine segment and in that event one can not differentiate whether it is low-lying, or partial or total previa. Broad ligament varicosities have been reported as a cause of a false-positive result.[13]

The amount of radiation dose to the mother and fetus has been shown to be quite low with the amount of RISA-I^{131} used in this method. Fetal total body exposure was estimated by Weinberg, using 5 microcuries of RISA-I^{131}, to be about 20 mrads. This is stated to be approximately 10 times less than the maternal and fetal radiation exposure when two films of the abdomen are made in the anteroposterior and lateral projections. A further reduction in fetal and maternal radiation exposure has been obtained by using other

isotopic placental localization methods than the one described. Utilizing a 20 microcurie dose of Cr^{51} a 2 mrad total body fetal exposure was found and using Tc^{99m} in a dosage between 200-500 microcuries, a 5 mrad total body fetal exposure was estimated.[2]

Isotopic placentography is one of the most reliable procedures for placental localization and authors in the current literature report accuracy consistently in excess of 95 per cent.

A disadvantage of the method described is that localization is inferred from a study of the counts made in the areas examined. Visual confirmation of the placenta may be made using TC^{99m} and this may be done with a scanner to obtain a dot and photoscan or with a gamma camera to obtain a scintiphotogram.

Conclusions

1—Seven patients were checked for placental localization with RISA-I^{131} and abdominal sector counting. These cases have delivered and accuracy of localization was 100%.

2—Some of the advantages and disadvantages of this method are discussed.

3—A brief comparison with other methods of placentography is made.

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EVALUATION OF THE NUTRITIONAL NEED FOR ENRICHMENT

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The program for the enrichment of staple grain foods in the United States of America dates from March 18, 1939, when the Council on Foods of the American Medical Association issued its statement encouraging restorative addition of vitamins and minerals to general purpose foods.[1] The first enrichment laws in the United States were enacted in South Carolina in 1942.[2] Since that date 26 other states have enacted enrichment laws. Many articles and statements have been issued,[3-5] most of which endorse the principle of enrichment; however, few analytical data are available which evaluate objectively the nutritional importance of enrichment[6,7] to a sizable segment of the population of continental United States.

Proper evaluation of enrichment is complicated by changes in the food habits which have altered the dietary intake significantly.[8] These changes were caused by rapid industrialization and a general rise in the standard of living, increased use of convenience and snack foods, and increased eating away from home. In general, nutritionists agree that the enrichment of staple grain foods is contributing to the health and well-being of a sizable segment of the population, but none agrees exactly on the degree of this contribution.

The objective of this investigation was to determine if there is a nutritional need today, and whether there will be a nutritional need in the immediate future, for a continuing enrichment of staple grain foods with thiamine, niacin, riboflavin, and iron. The study area was restricted to the state of South Carolina where state legislation has required the enrichment of flour, bread, corn meal, and grits for over twenty years and the enrichment of rice for over ten years.

Nutritional inadequacies in South Carolina and those in the rest of the nation and the world will vary considerably, but at the present time, enrichment of flour, bread, degerminated corn meal, and grits is practiced widely throughout the United States. Enrichment of rice for distribution to the National School Lunch Program and other eligible recipients is required by federal law.

Methods

The subjects selected for this study represent a geographic cross section of the state of South Carolina. Two hundred and forty-two pregnant women from low-income families of mixed ethnic origin experiencing their second or third trimester of pregnancy were selected for this study.

Low income pregnant women were selected for the following reasons:

(a) Women in their second and third trimester of pregnancy have augmented nutritional requirements; therefore, nutritional deficiencies are most likely to be observed in this group.

(b) Pregnant women represent a significant segment of the population.

(c) Low-income families are expected to derive the major benefits from the enrichment program.

(a) *Evaluation of the Importance of Enrichment to Diets*

An experienced interviewer used the 24-hour recall technique[9] to obtain information on the dietary intake. The interview was held in a separate room with only the woman interviewer and patient present. Conditions were relaxed and every effort was made to avoid embarrassment and gain the confidence and co-

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Table I. Contribution to diets by enrichment ingredients

Percentage of Total Intake

	IRON		THIAMINE		RIBOFLAVIN		NIACIN	
	Mean	S. D.*	Mean	S. D.	Mean	S. D.	Mean	S. D.
Area I 95 Subjects Greenville, S. C.	21.34	10.29	23.91	11.73	13.49	8.39	16.33	9.26
Area II 95 Subjects Columbia, S. C.	15.45	8.72	20.23	12.35	7.80	4.53	11.20	7.52
Area III 52 Subjects Coastal Area of S. C.	21.21	17.67	21.17	18.34	10.87	14.91	18.34	16.50
Mean of Area I, II, & III 242 Subjects	19.33	12.22	21.17	14.14	10.52	9.27	15.29	11.09

*Standard Deviation.

operation of the patient. The daily intake of specific nutrients was then computed by referring to the United States Department of Agriculture Home and Garden Bulletin No. 72, *Nutritive Value of Foods*. In the case of snacks and other convenience foods, where no published figures are available, the authors' analytical data were used. Calculations on enriched rice did not include riboflavin, as the faint cream color imparted to white rice by the addition of riboflavin has as yet prevented its addition during the enrichment process.

To determine the contribution of the enrichment program, the subjects' intake of thiamine, niacin, riboflavin, and iron was calculated on the basis of all staple grain foods having been enriched. The intake was then calculated on the basis of none of the staple grain foods having been enriched. The difference between these two values was divided into the subjects' total intake to determine the percentage of thiamine, niacin, riboflavin, and iron contributed by the enrichment program to the diets of these subjects (Table I and Figure I).

(b) *Analysis of Blood and Metabolic Products*

Ten milliliters of blood were collected from each woman interviewed in 10 ml vacutainer tubes containing 10 mg of ethylene diamine tetra acetate and immediately transported to the laboratory for analysis. Approximately 40 ml of urine were collected from each subject and placed in dark bottles. In cases where urine samples were to be refrigerated prior to analysis, the samples were acidified to pH 3.5 with hydrochloric acid.

A hemoglobin determination was performed by the cyanomethemoglobin method described by Hainline.[10] In order to check the hemoglobin values and to establish the volume of packed red cells, a micro-hematocrit determination was performed.[11] The vitamin C content of whole blood was determined by a modification of the photometric procedure described by Bessey and associates.[12] The riboflavin content of whole blood was assessed by the fluorometric procedure described by Burch et al.[13] Total iron was determined in whole blood by a modification of the procedure described by Wong.[14] The creatinine content of whole blood was assessed by a modification of the alkaline picrate method.[15]

Urinary creatinine, as assayed by the alkaline picrate method, served as an excretion index for the interpretation of thiamine and N'-methylnicotinamide in urine samples. The urinary N'-methylnico-

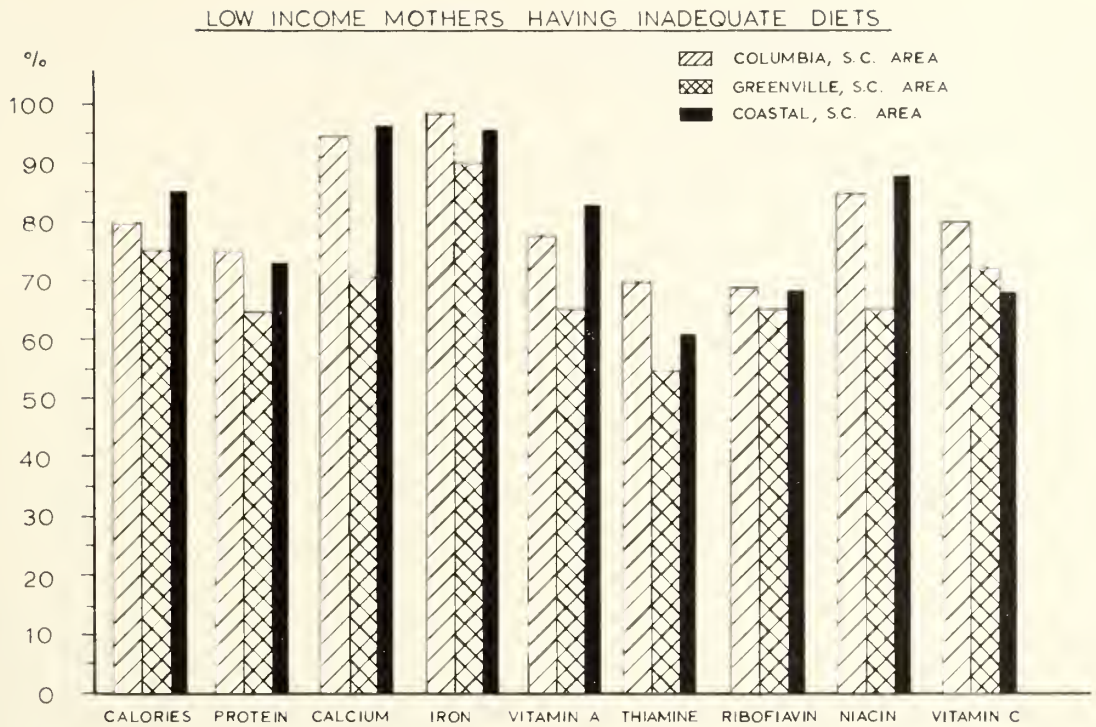


Fig. 1. The dietary adequacy was based on National Research Council's Recommended Dietary Allowances for Pregnant Women in second and third trimesters. Actual values were: 1,800 calories, 78 Gm protein, 1.3 Gm calcium, 15 mg iron, 6,000 IU Vitamin A, 1.0 mg thiamine, 1.5 mg riboflavin, 16 mg niacin, and 100 mg ascorbic acid.[19]

tinamide content was determined by the method of Huff et al.[16] The urinary thiamine content was assessed by the method of Mickelsen et al.[17]

Results

The results from this dietary survey show that there were many serious dietary deficiencies in iron, thiamine, riboflavin, and niacin (Figure I). Dietary deficiencies in vitamin C, calcium, protein, and other essential nutrients were also found. The greatest deficiencies were in calcium and iron. Only about five per cent of the subjects studied had an intake of calcium and iron which could be considered adequate, according to standards recommended by the National Research Council.

The composition of blood and urine is shown in Figure II. In almost all instances, except for the amount of circulating iron, the percentage of subjects below normal in their circulating nutrient content was lower than the percentage of subjects below normal in nutrient intake (Figure 1). This difference might be explained by the fact that intakes were calculated on the basis of one day, while blood levels were a reflection of a longer period of time.

Approximately seven per cent of the subjects were found to have inadequate venous blood riboflavin levels, while 50.8 per cent of the subjects were found to have inadequate blood ascorbic acid levels. The hemoglobin value and the total circulating iron content were found to be inadequate in 58.4 per cent and 94.2 per cent of the cases, respectively. Urinary excretion studies indicate that 4.7 per cent of the subjects were deficient in thiamine and 48.8 per cent of the subjects deficient in N'-methylnicotinamide, a niacin metabolite.

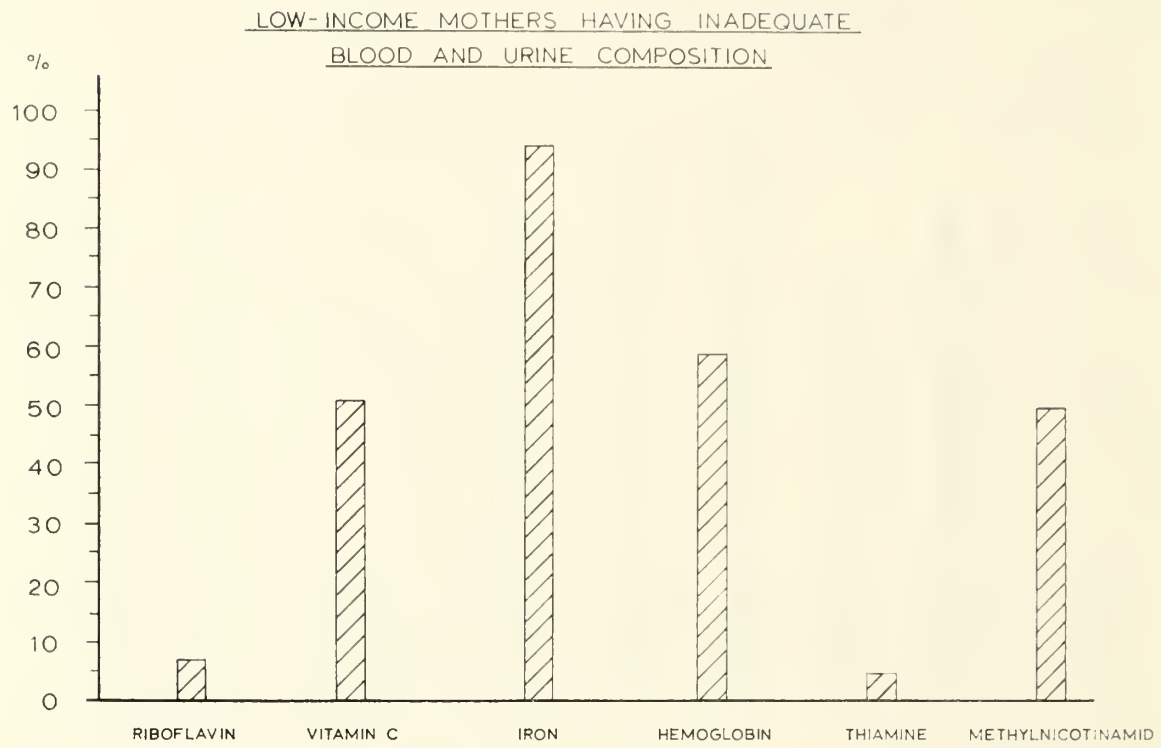


Fig. 2 .Blood composition was considered inadequate if the values were below the following: riboflavin, 8.7 ug per 100 ml; vitamin C, 0.9 mg per 100 ml; total iron, 42.0 mg per 100 ml; hemoglobin, 11.7 Gm per 100 ml. Urine composition was considered inadequate if values were below the following: thiamine, 21.0 ug per Gm. creatinine; N'-Methylnicotinamide, 0.8 mg per Gm creatinine.

The contribution of the enrichment ingredients to the nutrient intake of these subjects is shown in Table I. The enrichment program contributed 19.33 per cent of the iron, 21.17 per cent of the thiamine, 10.52 per cent of the riboflavin, and 15.29 per cent of niacin intake of these subjects.

Discussion and Conclusions

The results of this survey indicate that severe vitamin and mineral deficiencies occur in the low income pregnant woman population tested. Furthermore, deficiencies are observed even though the enrichment ingredients contribute significantly to the total nutrient intake.

Noting the frequent deficiency in iron, careful consideration is needed on a recommendation which would lead toward increasing the amount of iron added in the enrichment process. Many investigators have observed that diets are frequently low in iron, but no concerted effort has been made on a wide area basis to correct this situation. Data here collected indicate approximately one fifth of the iron consumed by these subjects resulted from iron added during the enrichment process.

Considerations for adding more iron to the diet of the masses renew a series of discussions as to whether the limiting factor in hemoglobin regeneration might not be the intake of protein, copper, cobalt, or other constituents rather than that of iron. Proposals for the addition of more iron to flour and bakery products renew technical problems involving the catalytic effect of iron on rancidity, discoloration, etc. Furthermore, enrichment of flour, bread, corn meal, and grits is now an operational routine in mills; any change would disrupt normal operation and require relabeling packages. Cost would not

be a factor as the total enrichment ingredient cost is approximately three cents per hundred pounds of flour. The fact still remains that a large segment of the populations is not obtaining enough iron in its diet, and that further consideration is needed to find means to correct this deficiency.[18]

Deficiencies in thiamine, niacin, and riboflavin, although less severe, were also observed in both the dietary studies and the analysis of blood and metabolic products. The advisability of having enrichment make still a larger contribution is a matter which should be given further consideration.

Alternative methods of improving diets by better selection and use of natural foods remains a longtime educational and economic goal. Thus the question regarding enrichment is not whether enrichment is needed at the present time, but rather, whether the amounts added should be increased.

Summary

The diets and blood composition of 242 low-income mothers showed inadequate intakes of iron, thiamine, riboflavin and niacin. Their diets included the enriched forms of flour, bread, corn meal, corn grits, and rice in such amounts that the average contributions from the enrichment ingredients were: iron, 19 per cent; thiamine, 21 per cent; riboflavin, 11 per cent; niacin, 15 per cent.

The total amount of iron in the blood of these women was low in 94 per cent of the cases. Fifty-eight percent showed low hemoglobin and hematocrit values. The riboflavin content of the blood was found to be abnormally low in nine per cent of those studied. Analysis of the urine based on creatinine excretions showed approximately five per cent were below normal in thiamine and 49 per cent below normal in niacin.

Although these subjects were examined at county health departments in South Carolina, it is probable that their condition and the benefits they received from enrichment are similar to those received by a significant segment of the population.

Acknowledgement

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X-RAY FILM OF THE MONTH

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The film illustrated is that of a 42 year old white male who injured his wrist in a fall. An oval radiolucent area in the proximal phalanyx of the index finger was noted and a film of his hand revealed the lesions seen above. On questioning, the patient related he had noted for some years that his index finger was slightly knobby but "it had never bothered him and he had not bothered it."

These oval lesions in the phalanges are enchondroma. They represent a collection of cartilage cells replacing normal cancellous tissue. The tumor is non-invasive but the mass may erode cortical bone by pressure. As the erosion is slow, new bone is laid down and the result is the appearance of cortical expansion. Enchondromata usually are found in the shaft, sparing the epiphyseal regions. Quite often they are eccentrically located, producing a pronounced bulging of one side of the bone. Within this area of radiolucency, focal areas of increase in density may be present. These represent foci of calcification or ossification of the lesional cartilage.

Quite frequently, a pathological fracture through the affected phalanx is a presenting symptom. Some patients have noted spontaneous swelling in the region of the affected phalanx, at times associated with intermittent pain. Enchondromata may involve a single bone, a few bones, or show extensive involvement. Any lesion presenting anything like the roentgenographic picture illustrated and situated in the middle or proximal phalanx of a finger is almost certainly an enchondroma. While enchondromata in general can undergo malignant transformation into chondrosarcoma, those of the phalanges almost never do.

Usually the lesions are ignored except when they produce clinical symptoms or complaints or where removal would be desired for cosmetic reasons.

My Political Creed

I am a free citizen in a free nation.

Whoever diminishes my freedom as an individual diminishes the sum total of freedom in my country.

I am also a physician, free thus far to treat my patients to the best of my ability.

Abridge that freedom and the health of my patients is adversely affected.

These things being true, I cannot--I will not--stand idly by when these hard-won freedoms are under attack.

For I believe that the values upon which this country was founded are immutable and have not been eroded by the passage of years.

I believe that I, as a free citizen in a free land, am obligated to defend my beliefs in the ways permitted to me, and required of me, by our form of government.

Therefore, let no man seek to bar me from the political process; for it would be akin to denying my right to participate in the process that determines free government.

President's Pages

(Editor's Note: The President's Page this month has been given over by the President to a guest editorial by Dr. Donald Kilgore.)

WHAT WILL YOU DO?



The necessity for joining SCALPEL now is urgent. Your efforts and your money are needed desperately in this most critical of election years. 1968 may be the last opportunity that we have to salvage the free practice of medicine. To those who still cherish that quaint antediluvian idea that doctors are not and should not be in politics, I can give several disturbing arguments.

1. The forces opposing us are using every possible method to discredit the physician in the eyes of the public. Two examples of this will suffice: 1) In July 1966 the Department of Justice filed an antitrust suit against the College of American Pathologists for monopolistic practices. The absurdity of the charges has been demonstrated by the fact that after the initial splurge of publicity, no significant action has been taken for two years. 2) Just recently the ridiculous charge was circulated widely that radiologists were giving Negro patients greater x-ray exposure than white patients. Although this charge was manifestly untrue, the accusations were in large headlines and the refutations were given small print on the back pages. Physicians in other fields can expect similar attacks in the future.
2. There is an increasing number of "National Conferences" to present preformed ideas and conclusions to the general public about medical practice. The participants are carefully chosen in order that the right viewpoint may be given. A recent example of this is the report of the National Conference on Group Practice held in October, 1967. This report called "Promoting the Group Practice in Medicine" may be obtained from the Superintendant of Documents at the U. S. Government Printing Office for 30 cents. For those who still have their heads in the sand this is a very illuminating document. The group practice promoted here is *not* physicians in private practice on an individual basis coming together in partnerships to render more efficient service for their patients. The group practice endorsed by this Conference is a prepaid capitation type of medicine rendered by salaried physicians in large groups. Among the Chairmen leading the discussion groups were: 1) Sam Pollock, President of the Meat Cutters District Union 427 AFL-CIO Cleveland, Ohio. 2) Dr. Caldwell B. Esselstyn, Associate Program Coordinator in the New York Metropolitan Regional Medical Program. (You may remember that he was formerly Director of the Rip Van Winkle Clinic in up-state New York until it went bankrupt.) 3) Raymond M. Kay, the Medical Director of the Southern California Kaiser Permanente Medical group. The remainder of the participants by a large majority were either non-physicians or physicians from large prepaid medical groups. Therefore it is hardly surprising that they concluded that the prepaid medical groups were the utopian answer. If you sit on you hands long enough, these people will be telling you how to practice medicine.
3. Public Law 89-749 concerning comprehensive medical care planning has been on the books since 1966, but most doctors do not know of its function or even its existence. Briefly this law provides that all planning for hospitals and medical care facilities supported by federal tax payers funds will be decided by state and local commit-

tees on which doctors and all personnel connected with the health field must be in the minority. This law states that at least 51% of these committee members must be "consumers".

In order to pass on the private practice of medicine to our children and grandchildren, we must elect men to Congress who believe that the past possesses sufficient virtue to be the cornerstone on which the future is built. We must elect men who believe that our society should guard the opportunity for man to develop according to his natural endowments rather than to be restricted by the lock-step uniformity of any man-regulated system. These men must recognize the vital distinction between reform and change for the sake of change. They must place their trust in evolution and reject revolution. These men must possess compassion, be responsive to human need, must trust the wisdom of individuals to function as individuals, and reject those who would constrict the individual's responsibiilty to himself and the ordering of his own life. In summary, they must believe with Edmund Burke that reasonable men have "a disposition to preserve and an ability to improve".

What are the consequences if we do nothing? Almost exactly two years ago, eight student nurses were brutally murdered in their apartment on the South Side of Chicago. One girl survived by throwing herself under a bed out of the sight of the murderer, where she apparently was forgotten. This girl, Corazon Amurao, later described her experiences. While the murderer was waiting for the last of the girls to arrive at the apartment, she and the other girls had discussed what they ought to do. Miss Amurao and two other girls from the Philippines had urged trying to overpower the man, even though he was armed. But these three were outvoted by their American colleagues, one of whom had recently completed a course in nursing psychiatry. Her argument was "if we keep quiet and calm, maybe he will keep quiet and calm." This is what happened. After binding them, he quietly and calmly led them out, one by one, and butchered them!

If we keep quiet and calm we may expect the same fate. Let us fight while we are still able to do so. As Ben Franklin said to the signers of the Declaration of Independance, "Gentleman, let us all hang together, or assuredly we will hang separately."

Donald G. Kilgore, Jr., M.D.

At my request this editorial was prepared by Dr. Donald Kilgore, Jr., Chairman of SCALPEL, for publication on the president's Page of the South Carolina Medical Journal. This matter deserves the immediate, thoughtful consideration of every doctor in South Carolina regardless of his political affiliation. At its recent meeting in Myrtle Beach the House of Delegates of the South Carolina Medical Association re-affirmed the necessity of political involvement by the individual physicians and urged that all physicians and their wives become members of SCALPEL. Annual dues are $20.00 and may be mailed to Dr. Benton Burns, 18 W. Canal St., Sumter, South Carolina.

Joel W. Wyman, M.D.

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50 YEARS AGO

The Journal of the South Carolina Medical Association

July 1918

The Volunteer Service Medical Corps was discussed. Its membership consisted of physicians who were overaged, disabled, had dependents or who were otherwise essential and would serve in the reserve medical corps.

Editorials

FLEX

A major step in medical licensure was taken by the Federation of State Medical Boards of the U. S. A. at its annual meeting in February of this year. By unanimous vote the Boards agreed to develop and promote an examination to be known as FLEX. Its objectives are

—Uniformity in licensing examinations
—Equivalent levels in examinations
—Improvement in the quality of examinations
—Creation of a rational basis for endorsement
—Placement of licensure in relation to modern medical education
—Assistance to state boards in managing the foreign medical graduate problem.

Seven states are expected to use FLEX in 1968 and it is anticipated that a total of 2,500 candidates will be examined.

One of the primary purposes of the Federation at its founding in 1912 was to improve endorsement procedures between the States with a free flow of physicians from state to state. Over the years many approaches have been attempted to accomplish this goal. Progress has been made, but slowly. A physician licensed in one state still has difficulty in obtaining a license in another. FLEX will permit a pooling of knowledge, experience and resources of all the state boards that should eliminate the discrepancies existing with 50 different examinations of varying degrees of difficulty. It is to be hoped that all states will see fit to support the Federation in its effort and thereby eliminate one of the major barriers to universal endorsement. If this attempt fails, the advocates of a system of a national licensure under the control of the Federal Government will have a convincing argument to support their case.

H. E. J., Jr.

Malnourished South Carolina

What is this malnutrition that has been decreed as being so prevalent in our South Carolina counties? Sixteen of them have been stigmatized as being hot beds of starvation and malnutrition by some unknown and zealous "committee of private citizens" who probably view our state from the vantage point of Boston, Chicago, San Francisco and other distant and unsympathetic spots. Perhaps they have made a whirlwind tour of one or two of our counties, talked to a few owners of bleeding hearts, and viewed a specimen or two of our rare malnourished citizens paraded for their inspection. Certainly they have listened to reports from a few counties, though the status of the reporters is not evident.

This group of indignant investigators is apparently self appointed, or selected by the officials of the unofficial Citizens Crusade Against Poverty, a movement with questionable credentials. How do they expect to find belief for their unsubstantiated findings?

We South Carolinians who travel at times about our state do not encounter the obvious evidences of malnutrition. A broader picture of our conditions of nutrition, among children at least, may be obtained from the official reports of the State Board of Health on patients seen at their well-child conferences. These are scheduled periodic clinics maintained for the benefit of the less affluent members of our society. The greatest number of the patients are of the truly indigent class, and a great majority of them are Negroes.

In these reports it to be found an excellent cross section of the state of nutrition in the age group from birth through five years. Examinations are made by physicians, largely by pediatricians, all of them competent to recognize malnutrition and to prescribe treatment if need be.

For the year 1967, among over 19,000 children examined, malnutrition was noted in 1.6 per cent of new patients, one per cent of old patients. There was no material difference between whites and Negroes. These figures show a great improvement over those of 1940-41, for instance, when among some 13,000 children there was 4.25 per cent of malnutrition in new patients and 3.8 per cent in old patients, again with very little difference in the races.

If hunger is as frequent and as chronic as reecnt undocumented and unsolicited statements would lead one to believe, why is there not more clinically recognized malnutrition among these starving children? Medically, malnutrition refers to failure of absorption, rather than the quantity or quality of food. One might assume that a considerable part of the small amount of malnutrition reported is the result of various diseases not evident in the relatively brief examination of a Well Child Clinic. Another part is due to such misguided beliefs as that in which more costly nutritionally negligible carbonated drinks are fed to infants instead of the less costly and nutritionally vital milk. This does not derive from poverty, but from ignorance.

A full picture of malnutrition would require detailed laboratory tests to estimate the condition of the whole body. Lacking such information, one can still build an image from figures available which differ immensely from the misleading scene portrayed by uninformed busybodies.

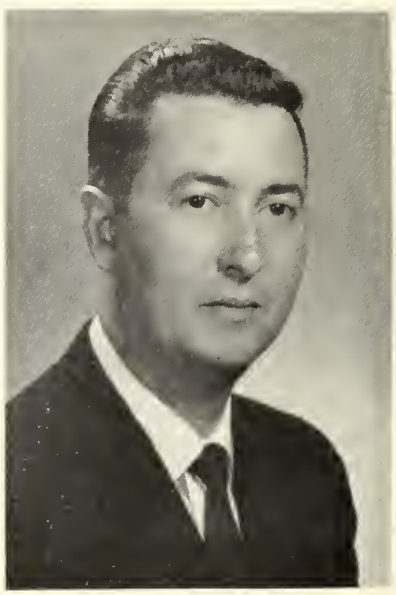
Board of Health Advocates Fluoride

For the third time the S. C. Board of Health has recommended that local cities and towns add fluoride to their water supplies to prevent tooth decay.

Having approved the plan in 1949 and 1954, the Board's Executive Committee has reaffirmed its backing of fluoridation. According to Dr. E. Kenneth Aycock, state health officer, many municipalities have adopted this method of prevention.

He points out that the Executive Committee made careful studies before it gave its original approval and has kept abreast of all major studies since. These have shown that there is about 60 per cent less tooth decay in children who drink fluoridated water from birth, and 20 per cent less for teenagers after they begin drinking it. This decay prevention measure is carried over into the adult ages.

The Executive Committee urges those areas without fluoridation to consider adding one part fluoride to one million parts water, the solution which has given so many young South Carolininas improved dental health.



J. E. Hiott, President

An Editorial from the Pharmaceutical Association

The society in which we live today gives us much reason to unify our efforts in many respects. Only by expressing ourselves and having communication one with the other can we truly work in harmony—to benefit each other, and more important, to benefit the patient. To have our thoughts and ideas exchanged in each other's Journal is a progressive step for the "Health Team."

Not only do we invite your comments in our Journal but if there are suggestions

you would care to make in your local community that you feel would help your Pharmacist better serve the patient, we urge you to do so. Call or drop him a note and he would appreciate it. Or perhaps you would perfer to meet with the local Pharmaceutical Association at one of their meetings and present your ideas. It would be interesting for us to know the Physician's reaction to the "professional fee" (wholesale cost + a service fee), rather than the commonly used "mark-up" method. You might like to invite one of this group to visit with your local association if you feel he has anything constructive to offer.

It is our hope that we will be better Pharmacists by your comments and constructive criticism and that any comments we make will be taken in the constructive light that they are given.

It is a pleasure for me to have had this opportunity to express these few thoughts. We have a high respect for your profession and look forward to future professional communications.

J. E. Hiott, President
S. C. Pharmaceutical Association

PRESIDENTIAL ADDRESS

May 13, 1968
Myrtle Beach, South Carolina

NORMAN O. EADDY, M.D.

Distinguished members of this house of delegates of our beloved South Carolina Medical Association, guests, and fellow-physicians who, though not delegates, are interested enough to attend as observers, this is the one hundred twentieth annual session of this Association. It is three years older than the American Medical Association. Thank you for attending. I know the golf courses, etc., are calling in insistent, dulcet tones.

It is with vast pride that I stand before you as president, the position to which you so graciously elected me two years ago, as president-elect. I have made no effort to rationalize your choice but I have made strenuous efforts to justify it. Now I appear before you to give an account of my stewardship.

During the year our profession has not attained all it desired but it has accomplished more than seemed probable.

Let me pause here to emphasize that any accomplishments were due to many people. My family, my office help, the Staff of Tuomey Hospital in covering me when I was absent, many individual physicians and legislators, and patients who were gracious in their understanding (when I had to break appointments) all deserve and are hereby tendered my deepest appreciation.

I must mention two people by name. One is Dr. McCord, the President of our Medical College. His position was most demanding. Politicians were pulling him one way and his duty as a medical doctor the opposite. He was true to his profession. He deserves the unstinted praise of the public and of our profession.

And I must mention with equal admiration and appreciation the knowledge and dedication of Mr. Jack Meadors, our executive-secretary. I must have called him a hundred times asking for information, to prepare reports, to travel about over the state, etc. Not once did he refuse or even appear unhappy. I extend the Association's and my appreciation particularly to these two men.

On my first President's Page I expressed the hope our profession would enjoy a courteous, serene, intraprofessional atmosphere, hoping we could try to keep our disagreements within the confines of the profession. It is with deep appreciation that I acknowledge your having assured that. Our profesison and our Association recognize the inevitability and even the desirability of disagreement.

Channels for considering conflicting views have been established by our constitution and by-laws all the way up to the Judicial Council of the AMA.

The Auxiliary is very much due our consideration. These good wives are pursuing a multipurpose program involving their student loan fund, nursing, highway accident prevention, etc., and doing it well.

The committee on Religion and Medicine, under Dr. N. B. Baroody, has been admirably active and deserving of high praise.

There are many other committees. Their accomplishments would surprise those who do not participate on them. All committee work is done for nothing and physicians pay their own expenses. On behalf of the Association—I thank them all.

Now let us consider some of the more urgent political matters. State and federal health programs are overwhelming. I have tried to keep up with them but one person cannot do it. Fortunately we have the Health Department, the committee on legislation, and others working at the job.

On the state level we have in the legislature a bill banning advertising by any professed members of the healing arts. I hope it passes.

In the state legislature is also a bill extending the privileges of podiatry. I hope it fails to pass.

The so-called "Doctor Draft Law" is of concern to us. No physician has been drafted. When a physician's name has come up as next on the list the physician has gone voluntarily into service unless he was declared essential and that is a rare thing. All physicians are essential: nobody wants to give up his.

Deferring one physician does not lessen the number who must go from the state. If twenty are called twenty must go. Deferring one simply means someone else, less eligible, must go in his stead. If you or your friends are tempted to ask the board to declare a physician "essential" ask yourself if you are willing to go in the doctor's place. If you are not you should not ask: if the doctor is deferred *someone* has to go in his place.

Consider now for a moment the South Carolina State Board of Medical Examiners. You nominate these men to the governor. He usually appoints the ones you nominate. Their chief function is not to decide which medical doctors shall be given licenses to practice medicine in this state but to police those physicians who already have licenses.

Appearance before the board with an M.D. degree from an accredited medical college pretty well assures the applicant his license. The degree from an accredited medical school guarantees his knowledge, etc.

But every few months when the board meets a number of physicians appear because of various real or suspected misdeeds. Alcoholism, dope addiction, unethical conduct, conviction of certain crimes, etc., bring physicians before the board for judgment. Sometimes they are guilty, sometimes the board decides they are not. The board is very conservative and always leans over backwards trying to help the accused physician. Sometimes it *has* to act, to protect the public and the profession, in a vigorous but distasteful manner, even revoking a license to practice on occasion. It is a thankless job and the board deserves our commendation.

The feeling among some boards that periodic re-examination of each physician is desirable is not shared by me. Almost all physicians I know astound me in the way they continue their education. Constant study of various medical magazines and journals, attendance at county, state, and district medical societies, and at staff meetings, and even formal postgraduate courses are commonplace. And it is astounding how rapidly a physician's practice disappears if he falls behind scholastically. In my perhaps limited view, periodic re-examination of physicians is not desirable.

Let us move on now to the perennial

osteopathic problem. As you know, a joint resolution of the house and senate created a committee to investigate an osteopathic college and hospital. We visited the Philadelphia College and hospital and Dr. McCord and I were astounded at its deficiencies. Some politicians are avidly determined to bring osteopaths in on an equal basis with M.D.'s without bothering to force the osteopathic schools and hospitals to be accredited by the committee that judges for accreditation the medical colleges and hospitals. Dr. McCord and I insisted that unless their schools were equally accredited we would not agree to recognize their graduates as equally educated. There the osteopaths rebel. They say we must accept their statement that their schools are as good. If the Philadelphia School and College are a fair example they could not be more wrong.

To make a long story short, Dr. McCord stated. "On the basis of my visit, I cannot recommend that osteopaths be given M.D. privileges in the state of South Carolina at this time" and the osteopathophiles ruefully moderated their stand and we all signed a report that the committee recommended no change in the osteopathic law at this time.

I am sure the osteopaths retreated with the intent of fighting again another day—probably when Dr. McCord and I are not honored with membership on any such committee. My full report, which you will find most revealing, can be secured from Mr. Meadors.

We are faced here with a principle of survival that *transcends all others, even socialization* of our profession. This principle that is paramount I have chosen to term "Fragmentation of the Medical Profession."

If optometrists, chiropractors, podiatrist, etc., can hold themselves out on *their* terms to the public as "doctors" (physicians) the medical profession will be fragmented to death. Even now a surprisingly large portion of the public knows no difference between these short-cut quasi doctors and regular medical doctors.

The state board of medical examiners has no authority over them. Nor is it easy for the public to sue them successfully. So long as they abide by the teaching of their profession, no matter how ridiculous, it is difficult to recover damages.

More and more young people will ask why they should go ten or fifteen years preparing to practice in some field of regular medicine when they can come before the public legally in an almost identical appearance from these quasi-medical schools after only five years.

Momentarily I expect x-ray technicians, laboratory technicians, electrocardiograph technicians, etc., to open schools and turn out "doctors" in each of those specialties.

Medicine is threatened, you see, with virtual extinction by being fragmented to death.

Well now, while we are on such an optimistic note, let me say a word or two about Title XIX. It is under the ultimate authority of the Department of Public Welfare and there is little we can do about it at present. The governor is quite aware that we are bitterly opposed to this. However, we did accomplish two very satisfactory pledges. (1.) The physician will be paid his usual and customary fee, and (2.) Title XIX patients will have free choice of physician—they will not have to go to the health department or cancer or crippled childrens' or any other clinic. Believe me, these are two important pledges. These patients are to be *private* patients.

Title XIX is supposed to be effective "soon" and, at first, to apply to those already on welfare. Further details can be had from Mr. Meadors.

At this time allow me to pay my respects to our delegates to the American Medical Association. Far from being bent on a pleasure jaunt these men participate in an exhausting schedule that would actually tax the mental and physical stamina of anybody.

Is the American Medical Association the nation's biggest, wealthiest labor union? Critics will make this statement repeatedly. It is not true. No one has to join the AMA. To practice medicine in S. C. it is only necessary to get your license and register it in your court house. You don't have to belong to the American, state, district, or county medical society. The AMA is a voluntary association, most of whose members happen to see pretty much alike. Labor union membership is not voluntary. AMA membership is voluntary.

What about the shortage of physicians? How many physicians can the public support? Is there a shortage or simply a maldistribution based on the economic facts of life? My only answer is that at present there is one medical doctor in our country for every 660 people—and the ratio is constantly diminishing.

Let me extend the respect of our society to those men who have volunteered to serve mankind in southeast Asia. Three Sumterites, among the many others, have gone, i.e., Benton Burns, Randy Bradham, and Julian Buxton.

Now, I suppose an address of this type would hardly be considered complete without words of adulation or vituperation for Blue Shield. I understand some of us are avidly pro and some avidly con. I happen to be sort of in the middle of the road. I will praise and criticize.

Surely Mr. Sandow and his Staff have done a marvelous job with Blue Shield. It pays its bills promptly, no breath of scandal has touched it. It is constantly enlarging its membership, and selling to higher and higher income brackets.

But its very success perhaps makes it subject to criticism. To me it seems Blue Shield should pay the physician's usual and customary fee.

I understand the barriers present in the constitution of Blue Shield and in the laws of our state. I realize Blue Shield has made tentative efforts along this line for years. I wish the contribution to its success we physicians made by accepting part pay fees was public knowledge. That contribution was the heart of the success of the program. Without it Blue Shield would not have had a chance.

And now I reach the end of this address, approach the end of the year you have so graciously awarded me as president. To me it has been a glorious, exhausting year; an enriching, expensive year. The work has been a labor of love, an enlightening work. The ideal has been that of seeking excellence for our profession, without expecting to attain perfection. My life will be brighter for the experiences, perhaps shorter for the hardships. I have tried strenuously not to injure anyone's feelings, yet to be frank. I have grown more aware of your perfections, more conscious of my imperfections. I seek your help for the incoming officers, your appreciation for their accomplishments.

You have given me a wonderful year; one that can never be surpassed. I thank you from the bottom of my heart and beseech Providence for a wonderful future for The Most Magnificent Profession the World Has Ever Known.

Prevalence of Chronic Disease Among Problem Drinkers—S. Pell and C. A. D'Alonzo Arch Environ Health 16:679-684 (May) 1968.

The subjects of the study of the prevalence of various chronic diseases were 922 employees who were known or suspected to be problem drinkers, and an equal number of matched controls. Of the first group, 532 were known cases. Of the known alcoholics, 306 were believed to be arrested and the remaining 226 uncontrolled. The total prevalence rate for all categories combined was 12 per 1000 population. Hypertension and cirrhosis of the liver were the only diseases which were both unequivocally and strongly associated with alcoholism. Although firm inferences were not possible due to the low prevalence of the other diseases, the data did suggest positive associations with peptic ulcer, asthma, diabetes mellitus, gout, neuritis, cerebrovascular disease, and heart disease. A negative association was found for kidney stones.

MINUTES OF COUNCIL
SOUTH CAROLINA MEDICAL ASSOCIATION

Myrtle Beach, South Carolina

May 12, 1968

The Council met in conjunction with the 120th Annual Session of the South Carolina Medical Association in the Ocean Forest Hotel Forest Room, Myrtle Beach, South Carolina, May 12, 1968 at 10:00 a.m. The meeting was called to order by Dr. William L. Perry, Chairman of Council, and the invocation was given by Dr. Harvey Atwill, Councilor Eighth District.

Those in attendance at the meeting: First District, Dr. Clay Evatt; Second District, Dr. Waitus O. Tanner; Fourth District, Dr. John P. Booker; Fifth District, Dr. John N. Gaston, Jr.; Sixth District, Dr. William L. Perry (Chairman of Council); Seventh District, Dr. Michael Holmes; Eighth District, Dr. J. Harvey Atwill; Ninth District, Dr. Harold P. Hope. Dr. Martin Teague, Third District, was absent attending a medical meeting in Houston, Texas conflicting with this date. Others attending were Dr. Norman O. Eaddy, President, SCMA; Dr. Joel W. Wyman, President-Elect; Dr. Harrison L. Peeples, Vice President; Dr. J. Howard Stokes, Treasurer; Dr. J. I. Waring, Editor of The Journal; Mr. M. L. Meadors, Executive Secretary and Counsel; Dr. George D. Johnson, Delegate to AMA; Dr. Joe P. Cain, Delegate to AMA; Dr. J. Hal Jameson, representing the S. C. Medical Care Plan; and, Dr. Ben N. Miller, Secretary.

Committee Reports:

Dr. Atwill reported for the Advisory Committee of Council to SCALPEL. Dr. Joel W. Wyman, Dr. Howard Stokes, and Dr. Harvey Atwill had been appointed by Chairman of Council to look into the feasibility of money supplied by the SCMA to SCALPEL as it might relate to the eleemosynary position of the society. The named committee investigated this point through the Judicial Council, AMA. The Judicial Council indicated that monies may be donated to SCALPEL by the society if this is earmarked specifically for educational purposes. The responsibility of the use of the money after being granted would rest with SCALPEL.

Dr. Norman Eaddy was asked to give the President's Report to Council.

The first item of the report was regarding Dr. Owens' position as Medical Advisor to the South Carolina Selective Service System. Dr. Frank Owens has served in this capacity since the inception of the Selective Service System and would like to be relieved. Dr. Eaddy felt that Dr. Owens should be asked to serve an additional year in this capacity and so moved. This was passed by Council.

Dr. Eaddy commented on the appointment of Mr. Wilbur J. Cohen as Secretary of Health, Education and Welfare. Cognizance was taken of the fact that Mr. Strom Thurmond had taken a stand against the appointment of Mr. Cohen, and it was felt that his support of medical opinion should be recognized. Dr. Evatt moved and, after discussion, it was passed by Council that Mr. Thurmond be commended on his stand and his support of the profession in this manner.

Because of publicity and activity in the field of organ transplants, Dr. Owens had requested Dr. Eaddy to appoint an ad hoc committee on this subject. The following people were appointed: Dr. Dan W. Ellis, Charleston; Dr. Curtis P. Artz, Charleston; Dr. Arthur V. Williams, Charleston; Dr. Peter C. Gazes, Charleston; and Dr. H. Biemann Othersen, Jr., Charleston. Since this was a temporary committee, Dr. George Johnson moved that this committee be appointed on a permanent basis, seconded by Dr. Waitus Tanner, and the motion was carried.

Dr. Eaddy presented a letter from Miss Clara Bouknight, President of the South Carolina Nurses' Association, in which she suggested the need for continuing dialogue between physicians and nurses in South Carolina to promote improved patient care and physician-nurse collaboration. Dr. Eaddy recommended that this request be turned over to the Committee on Liaison with Nursing Education (Subcommittee under Cooperative Activities). Council moved this disposition of Miss Bouknight's communication.

Dr. Eaddy has had invitations from the Medical Association of Georgia, the Tennessee Medical Association, and others, to attend their annual meeting. He stated that he had not been able to accept these invitations and these invitations are recorded in the minutes as information.

A communication from Dr. Robert A. Ross, President of the Medical Society of the State of North Carolina, and Dr. Fred C. Hubbard, Chairman of the Committee on Nursing, in which efforts were cited from the State of North Carolina in the area of promotion of nursing education. It was requested in this communication that the South Carolina Medical Association go on record in support of federal legislation which would furnish support in the area of nursing, and a specific bill was mentioned (HR 12571). This communication was received as information.

A letter and a document were presented from Dr. James L. Goddard, Commissioner of Food and Drugs, correcting a misquote by United Press International. Dr. Goddard was quoted as implying, "What can be done to protect you from your doctors?" Apparently this statement had been taken out of context and out of justice to Dr. Goddard an explanation was presented. Again, this communication was taken as information.

Council is to nominate a member to the Tuberculosis Control Commission to be named by the Governor. Dr. Atwill nominated Dr. Richard S. Pollitzer of Spartanburg. This name was approved by Council. The name is to be put in nomination by Dr. Howard Stokes to the House of Delegates.

A letter addressed to Dr. Eaddy from Dr. Edward F. Parker regarding the possible nomination of Dr. Alex Heise to the Tuberculosis Control Advisory Committee was taken as information. Dr. Parker's nomination of Dr. Heise was submitted through the South Carolina Thoracic Society.

Dr. Eaddy referred to a communication from Mr. William Huff regarding support of a Chaplain to attend to the needs of the Medical Center (Charleston Medical School Complex).

Mr. Huff's communication was discussed and received as information. No action was required.

Dr. Eaddy presented a communication from Dr. Roderick Macdonald, Rock Hill, South Carolina, Secretary-Treasurer of the S. C. Society of Ophthalmology and Otolaryngology. Dr. Macdonald presented resolutions from the society reacting to Judicial Council, American Medical Association, November 25, 1967 statement, "A doctor of medicine may refer his patient to a qualified and ethical optometrist for optometric care." Dr. Eaddy did not request action of Council at this meeting pending a telephone consultation with the Chairman of the Judicial Council which is an immediate prospect. Action was deferred.

A letter was presented by Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association regarding Nurses' Recognition Day as declared by the State Governor. This recognition has emanated from the work of Dr. G. B. Hodge of Spartanburg, South Carolina and is recognized by Council as commendable. The Secretary was directed to write a note of recognition and thanks to Dr. Hodge for his work in this area.

The society's precedent of recognizing outstanding individuals in newspaper and television programing in the field of medicine was discussed. No nominaiton for

recognition was forthcoming at this Council meeting.

Dr. Eaddy reported on a meeting with Governor McNair regarding Medicaid. Dr. Eaddy feels that Governor McNair has been extremely understanding and cooperative with the South Carolina Medical Association. Dr. Eaddy felt obligated to inform Governor McNair of the society's disagreement with his decision to assign the functions of Title XIX to the Department of Public Welfare. Mr. McNair indicated that he felt that his judgement had been correct and was firm in his decision. Dr. Eaddy indicated that Mr. Rivers, Director of DPW, again committed himself to pay "usual and customary" fees for medical services to doctors plus allowing the clients to have free choice of physicians.

The report of the conference with Governor McNair concluded Dr. Eaddy's report and he asked that his report be approved. Council moved, and the report was adopted.

The Secretary expressed appreciation for being allowed to serve in the capacity of Secretary to the Council for the last six years. He expressed his intent to retire as Secretary at the end of this annual meeting.

Dr. Joel Wyman, President-Elect, commented on the conflict of Class Reunion activities and the formal program of the society. He noted that many members were obligated to attend their Class Reunion Banquets, preventing them from attending the Annual Medical Association Banquet. Dr. Booker moved that the Secretary take up this matter with Mr. Bill Huff, Coordinator of Alumni Affairs at the Medical College, to see if this could be improved upon in the future. Dr. Booker withdrew his motion when a motion was offered by Dr. Joe Cain that a committee of three be appointed by the chairman of council to look into the matter of coordinating class reunions and the activities of the SCMA so that there would not be a conflict. This motion was passed. This committee is to report at the fall meeting of Council.

Dr. George Johnson, Delegate to AMA, reported. Dr. Johnson had a formal report which he will give to the House of Delegates and did not give his report in full to Council. His main report is based on the recent clinical meeting of the AMA. He indicates he has completed fourteen years of service as SCMA representative to the House of Delegates of AMA, and will ask to be relieved at the end of his present term. A general sense of commendation and approval for Dr. Johnson's long period of service was voiced by Council.

Dr. Joe Cain also reported as Delegate to the AMA, and indicated that his main report would be delivered to the House of Delegates as scheduled on the agenda of that organization.

Dr. Howard Stokes gave the Treasurer's report. Dr. Stokes' report included the report of the Investment Committee of Council. The income from investments are included in the formal report and the favorable yield from the investments are included in the formal report and the favorable yield from the investments was recognized by Council. Dr. Johnson moved that the Investment Committee continue as before with authority to act on investments as in the past year. The motion was passed.

The over-all report from Dr. Stokes, as Treasurer, was received on motion and passed by Council.

(January 1, 1967-December 31, 1967)

Dr. Joe Waring, Editor of the SCMA Journal, reported on the progress of this publication during the past year. The initial problems with the new publisher have been worked out and the publication is now satisfactory to Dr. Waring. The Editor remarked on the paucity of scientific papers.

Dr. Hal Jameson reported for the S. C. Medical Care Plan. He indicated that a bid had been submitted to Department of Public Welfare to act as fiscal agent for

REVENUE

JOURNAL			
Advertising	$35,713.73		
Subscriptions	4,748.50		
Total Revenue from Journal		$40,462.23	
GENERAL			
State Dues	$53,533.50		
Directories	16.25		
Commission on Coll. AMA Dues	684.55		
Benevolence Fund	1,528.50		
Total General Revnue		$55,762.80	
TOTAL JOURNAL & GENERAL REVENUE			$96,225.03
PERMANENT HOME FUND			$ 7,227.50

EXPENSES

JOURNAL			
Printing	$27,012.32		
Editor's Expense	642.58		
Salaries:			
Editor	2,400.00		
Secretary	600.00		
Adv. Mgr.	1,200.00		
Total Journal Expense		$31,854.90	
EXECUTIVE OFFICE			
Rent	$ 2,375.00		
Office Supplies	1,326.06		
Exec. Sec'y. Travel & Expense	2,321.47		
Salaries	29,172.00		
Total Executive Office Expense		$35,194.53	
SECRETARY			
Clerical Help	$ 900.00		
Total Secretary Expense		$ 900.00	
COMMITTEE ON PUB. RELATIONS			
Chairman's Salary (Dr. J. I. Waring)	$ 1,200.00		
Chairman's Expense	306.25		
Secretary	600.00		
Total Expense Committee on Public Relations		$ 2,106.25	
GENERAL EXPENSE			
Delegates' Travel & Expense	$ 738.23		
Other AMA Meetings Travel Expense	779.14		
President's Expense	1,500.00		
Treasurer's Expense	100.00		
Telephone & Telegraph	2,397.36		
Postage	759.53		
Insurance	1,744.35		
Newsletter	717.65		
Accounting & Audit	965.00		
Taxes	1,364.14		
Dues & Subscriptions	479.60		
Medico-Legal	581.65		
State Meetings	1,247.29		
Woman's Auxiliary Appropriation	1,670.75		
Woman's Auxiliary Bulletin	1,226.02		
Retirement & Pension Plan	3,979.75		
Public Health Information Com.	63.47		
Miscellaneous Committee Expense	116.61		
Historical Committee	500.00		
Benevolence Fund	2,000.00		
Miscellaneous	753.53		
Interest	495.00		
Hospitality Room	315.08		
Delegate, Student AMA	445.15		
President's Gift	200.00		
Total General Expense		$25,139.00	
TOTAL EXPENSE			$95,194.68
ITEMS HANDLED WHICH ARE NOT REVENUE			
AMA-ERF	$ 4,485.00		
AMA DUES	94,995.00		
County Dues	840.00		
SCALPEL Dues	4,650.00		
INCOME FROM INVESTMENTS			
Peoples Federal Savings & Loan Assn.			$ 609.56
Dividends Reinvested (Investors Mutual Fund)			4,018.08
Permanent Home Fund (See Below)			2,719.88
Total Income from Investments			$ 7,347.52
INVESTMENTS			
General Fund			
Peoples Federal Savings & Loan Assn.			$14,004.60
Investors Mutual Fund—5,683.325 shares $11.273 per share (Value as of April 30, 1968: 5789.421 shares $11.38-$65,883.61)			64,085.77
Total General Fund			$78,090.37
PERMANENT HOME FUND			
Aiken First Federal Savings & Loan			$11,344.42
Security Federal Savings & Loan, Aiken			11,344.45
Anderson Savings & Loan			11,351.82
First Federal Savings & Loan, Anderson			11,351.89
Home Bldg. & Loan, Orangeburg			11,339.61
*Pickens Bldg. & Loan			11,143.03
Total Permanent Home Fund			$67,875.22

(This total includes interest earned in 1967 of $2,719.88)

(All of the above currently pay interest at 4½%)

*This amount includes $6,945.00 collected for the Permanent Home Fund in 1967.

physicians in implementing Title XIX. Some misgivings were expressed by members of Council regarding the handling of Title XIX by DPW because of the tremendous size of the project.

Dr. Jameson commented on the Medical Fee Schedule to the S. C. Industrial Commission. He indicated that some adjustments had been made. Dr. Harold Jervey is Medical Advisor to the S. C. Industrial Commission. Dr. Jameson suggested that any change in fees might be passed on as information to the physicians of the state through Dr. Jervey and through Mr. Meador's office.

There was a brief recess of Council and in this time Dr. Harvey Atwill and the Investment Committee had an additional meeting. The committee is listed as follows: Dr. Harvey Atwill, Chairman; Dr. Howard Stokes; Dr. Norman Eaddy; Dr. Harrison Peeples; Dr. Joel Wyman; and, Mr. Meadors, as ex-officio member. The committee reported to Council at the resumption of the meeting. It was recommended that the present investment plan be continued. It was suggested that the Permanent Home Funds as they accumulate be converted to Certificates of Deposits in banks or Savings and Loans where by best advantage of interest may be obtained. A motion was made by Dr. Stokes, seconded by Dr. Evatt, and passed.

Report of the Executive Secretary and Counsel was now given. Mr. Meadors indicated that he had completed twenty-four years of service to the society.

Mr. Meadors noted a net increase in membership during the past year of 17. The total membership at present is 1,638.

Mr. Meadors' report was very thorough covering areas of finance and legislation. His complete report will be given to the House of Delegates and will be included in the minutes of the deliberation of that body.

Mr. Meadors commented on arrangements for future meetings of the SCMA and stated that plans must be on a long-term basis rather than year by year.

Dr. Joe Cain discussed Mr. Meadors' report, particularly in the area of legislative activities.

The Executive Secretary's report was favorably received and general commendations expressed by members of Council.

Membership on the Mediation Committee terminates in the Third, Sixth, and Ninth Districts. Two nominations for each position are to be made by Council on recommendation from the Councilor for the particular district. In the absence of Dr. Martin Teague from the Third District, the delegation from this district will be polled for recommendation.

From the Sixth District, Dr. William Perry made the following nominations: Dr. Swift C. Black, Dillon, and Dr. R. Cathcart Smith, Conway.

From the Ninth District, Dr. Harold Hope nominated Dr. W. A. Wallace, Spartanburg, and Dr. John H. Cathcart, Jr., Gaffney.

Dr. Wescoat A. Black of the First District has offered his resignation because of the difficulty in traveling to the meetings. Dr. Clay Evatt offered in nomination Dr. Robert S. Solomon, Moncks Corner, and Dr. Joseph F. Flowers, Walterboro, to complete the unexpired term of Dr. Black.

Dr. Howard Stokes was nominated by Dr. Joe Cain to succeed himself as Treasurer. Council indicated its appreciation to Dr. Stokes for his service and the motion to nominate Dr. Stokes to succeed himself was put and carried by Council.

Dr. Eaddy presented a letter from Mr. C. L. McEachern, O. D., President of the South Carolina Optometric Association, requesting a liaison meeting between his group and a suitable committee from the South Carolina Medical Association. Dr. Eaddy did not request any action and this was taken as information.

Dr. John H. Young, Chairman of the Committee on Eye Bank, subcommittee under Cooperative Activities Committee, presented a report on the activities of this

committee. He cited excellent acceptance of the program by the public and indicated the scope of activity in the past year. He is to report this to the House of Delegates at the annual meeting.

Dr. Young was thanked for his report and it was favorably received.

Meeting adjourned at 1:15 p.m.

Ben N. Miller, M.D.

Myrtle Beach, South Carolina
May 12, 1968

The second session of Council, South Carolina Medical Association, was called to order by the Chairman, Dr. William Perry, at 2:45 p.m. in the Forest Room, Ocean Forest Hotel, Myrtle Beach, South Carolina.

The following were present: Dr. Clay Evatt; Dr. Waitus Tanner; Dr. John Booker; Dr. John Gaston; Dr. William Perry; Dr. Michael Holmes; Dr. Harvey Atwill; Dr. Harold Hope; Dr. Norman Eaddy; Dr. Joel Wyman; Dr. Harrison Peeples; Dr. George D. Johnson; Dr. Hal Jameson; Dr. Ben Miller; Dr. J. I. Waring and, Mr. M. L. Meadors.

Mrs. William J. Strohecker, President, Woman's Auxiliary to the South Carolina Medical Association was presented to Council.

Mrs. Strohecker reported a membership in the Auxiliary of 993 (membership in fourteen [14] county organizations). She reported on the wide interest of the Auxiliary. Activity in accident prevention and poison control was reported. In the area of International Health, 2500 pounds of drugs to World Medical Relief, Inc. have been packed and shipped to various areas overseas.

The Auxiliary has been outstanding in Community Service, Health Education, etc.

Council recognized that Mrs. Strohecker had presented an outstanding report and was favorably received. She was sincerely thanked by Council.

Mrs. Strohecker presented Mrs. Peter Gazes, President-Elect to the Auxiliary.

Dr. Charles C. Wannamaker was presented to Council, representing the Committee on Medical Aspects of Sports, Chairman, Dr. Judson Hair. The committee urges that all measures be taken to have one physician present at all football games. Dr. Wannamaker reported on the Third Annual Conference on the Medical Aspects of Sports which was held in Greenville in April of 1968. A deficit was incurred in the expense of that meeting of $50.00.

Dr. Wannamaker's report was favorably received by Council. Dr. Hope moved that Council supply the $50.00 to cover the deficit. This was passed.

Dr. Thomas E. Hair, Jr., Chairman of the Committee on Medical Education, appeared before Council to make a request for his committee. Dr. Hair reported on the progress of Medical Education through Educational T.V. The first five years of this program was financed by a grant from Merck Sharp & Dohme in the amount of $13,000 per year. During the past two years $8,000 per year has been supplied from funds from the Medical College. It is the feeling of Dr. Hair's committee that the major portion of this expense should be carried by the association and he requests $5,000 per year for this purpose.

Members of Council discussed Educational T.V. in the area of Medical Education with particular reference to doctor participation. Dr. Hair's report was received as information. Mr. Meadors was asked to write to the Presidents of the County Medical Societies to poll each group as to doctor participation in the program. A vote on Dr. Hair's request was withheld pending additional information as listed above.

Dr. Charles P. Summerall, III appeared before Council to report on the South Carolina Regional Medical Program. He introduced Dr. Joe Chambers, who has been employed as the Program Coordinator as of May 1, 1968. Dr. Summerall presented a brochure which outlines the basic program guidelines and the proposed proj-

ects of the Regional Medical Program. He indicated the desirability of having the wholehearted backing of the medical profession. He referred to action of the House of Delegates Annual Session 1965 when the House voted opposition to the RMP. He indicated that the original concept based on the Debakey Report was changed as legislation for the program developed and the culmination of the present plan of RMP is quite different from that rejected by the House of Delegates in 1965. Dr. Summerall stated that at his appearance before Council, SCMA, in 1967 the program as outlined by him at that time was approved by Council. (Review of the minutes indicate this to be incorrect).

Dr. Summerall was questioned by Council about various phases of the program. Dr. Eaddy asked if money might be supplied for Educational T.V. under the program. Dr. Summerall indicated that under the present plans submitted, which he hoped would be adopted under ublic Law 89-239 by August of 1968, this had not been included. He felt that a petition for a project in the area of Educational T.V. would be feasible after the initial plan had been approved.

Chairman of Council was asked to present the present format of the Regional Medical Program to the House of Delegates so that it might be referred to the proper Reference Committee and discussed in committee by Dr. Summerall. This, in turn, could be reported by the Reference Committee for any required discussion on the floor and action by the House of Delegates. By this approach, Dr. Summerall could have a sampling of opinion and reaction of the House of Delegates referable to the program as of this date.

Dr. Summerall was thanked by Council and his report was recorded as information.

As a follow-up on the discussion with Dr. Summerall, it was felt that Dr. Dale Groom should be invited to the fall meeting of Council, along with representatives of the Medical Education Committee so that action of the committee could be further explained and action could be taken on the request for support by Council.

Dr. Donald G. Kilgore, Jr., Chairman of SCALPEL, reported to Council in behalf of the Board of Directors of that organization. It is felt that a part time Director is desirable for SCALPEL, and he requests $5,000 from the South Carolina Medical Association to afford this Director. He indicates that a number of states (44) have Directors or part time Directors and many of these are housed along with the state organization business office and in some instances perform functions for the state organization as well as for SCALPEL.

Dr. Eaddy indicated that we were awaiting a report from Dr. Atwill's committee of Council referable to SCALPEL and action was withheld regarding Dr. Kilgore's request pending this report.

Dr. Eaddy moved that Dr. Kilgore be thanked for his good work and for his appearance before Council. This was passed.

Mr. Meadors had indicated in his report that possibly a change in the By-laws would be required so that Council could make some arrangements for the Annual Meeting, SCMA, several years in advance. Mr. Meadors took the occasion to look further into the matter and reported that it was not necessary to change the By-laws, and Council requested that Dr. Perry appear before the House of Delegates, suggesting a three-year schedule for the Annual Meeting. Dr. Cain moved that Council recommend that the next three yearly meetings be held at the Ocean Forest Hotel in Myrtle Beach. This motion was put and carried.

Council adjourned.

Ben N. Miller, M.D.

May 13, 1968

The meeting was called to order by Dr. William Perry, Chairman of Council. The invocation was presented by Dr. Harvey Atwill.

Members in attendance were as follows: Dr. Clay Evatt; Dr. Waitus Tanner; Dr. John Booker; Dr. John Gaston; Dr. William Perry; Dr. Michael Holmes; Dr. Harvey Atwill; Dr. Harold Hope; Dr. Norman Eaddy, President, SCMA; Dr. Joel W. Wyman, President-Elect, SCMA; Dr. Harrison Peeples, Vice President; Dr. Howard Stokes, Treasurer; Dr. J. I. Waring, Editor of the SCMA Journal; Dr. George D. Johnson, Delegate to AMA; Dr. Hal Jameson, President of the S. C. Medical Care Plan; Mr. M. L. Meadors, Executive Secretary and Counsel; and, Dr. Ben N. Miller, Secretary.

Dr. Harvey Atwill reported on the S. C. Medical Association's Council Committee on Aid to SCALPEL. His committee presented the following points. (1) Funds to SCALPEL could be furnished through the SCMA for the purpose of education only. The amount of the donation from SCMA could not be large enough to consist of the main income of SCALEL. (2) The committee recommends that all means of communication in the society be used to reach members regarding the aims and purposes of SCALPEL. He suggested The Newsletter, The Journal, and similar channels. (3) SCALPEL should make some objective report to Council at each Annual Meeting.

It was moved by Dr. Eaddy that the recommendations of the committee be accepted, seconded by Dr. Booker, put and carried.

Expressions were made from Council of appreciation to retiring members of the Blue Shield Board.

Dr. Josey made a brief supplemental report from his Committee on Medical Services referable to the handling of indigent patients. The various County Societies have been polled on their method of handling the indigent patients and this is to be furnished as information to the Executive Secretary.

Dr. Johnson reopened the matter of Council's consideration of the Regional Medical Program which had been presented by Dr. Charles P. Summerall at Council session on May 12. Dr. Summerall had assumed that he had had a formal Council endorsement of the plan on October 25, 1967 when it was presented to Council. The minutes indicated that Council asked Dr. Summerall to write a letter for distribution to the South Carolina doctors and it was agreed that this letter would be sent out describing the plans and purpose of the program. In reintroducing the subject, Dr. Johnson felt that Council should take some affirmative action so that this might be presented by Chairman of Council to the House of Delegates. Dr. Johnson moved that the plan, as outlined by Dr. Summerall, be approved by Council. This was seconded by Dr. Stokes; and, after due discussion, was put and carried.

Dr. Frank Owens appeared before Council to discuss the proposed Senate Bill-925 relating to atomic and nuclear energy exposure. This bill was discussed by Dr. Harvey Atwill. The bill applies specifically to occupational exposure under Workmen's Compensation and would be a protection to the profession if passed. Dr. Atwill indicated that there is an inspection service available through the Public Health Department which would certify equipment as far as exposure hazards are concerned. Dr. Owens' presentation was taken as information.

Council adjourned at 9:30 a.m.

Ben N. Miller, M.D.

May 14, 1968

Meeting of Council, SCMA, 9:00 a.m., May 14, 1968. The meeting was called to order by Dr. William Perry, Chairman of Council. Dr. Clay Evatt gave the invocation.

The following members were present: Councilors Dr. Clay Evatt; Dr. Waitus Tanner; Dr. John P. Booker; Dr. John Gaston; Dr. William Perry; Dr. Harvey Atwill; and the Councilors that were absent were Dr. Harold Hope; Dr. Michael Holmes; and, Dr. Martin Teague. Also present were Dr. Norman Eaddy, Presi-

dent; Dr. Joel W. Wyman, President-Elect; Dr. Harrison Peeples, Vice President; Dr. J. I. Waring, Editor of The Journal; Dr. George D. Johnson, Delegate to AMA; Dr. Hal Jameson, President of the S. C. Medical Care Plan; Dr. Ben N. Miller, Secretary; and, Mr. M. L. Meadors, Executive Secretary.

Council was asked to sponsor the Association of American Physicians and Surgeons Annual School Essay Contest. Dr. Booker moved that Council endorse the contest, seconded by Dr. Evatt, put and carried.

Dr. Eaddy commented on the resolution submitted to Council by Dr. Roderick Macdonald in behalf of the South Carolina Society of Ophthalmology and Otolaryngology regarding optometrists. Dr. Eaddy indicated that the decision regarding this resolution would rest on present action by the Judicial Council in reversing their former opinion. Should the Judicial Council not reverse their decision, then Delegates to the AMA House of Delegates should take Dr. Macdonald's resolution to that body. Dr. Johnson moved that such action be taken on the resolution presented by Dr. Macdonald. This was seconded by Dr. Eaddy, put and carried.

Dr. Eaddy reported on an article in the *News and Courier* covering his address of yesterday which made certain quotes that had been in his original script, but had been changed before it was presented to the House of Delegates. Dr. Eaddy felt that in justice to fact and to prevent misunderstanding in the future, that such news release should be cleared by the Public Relations Officer, Dr. Joe Waring, or through the speaker presenting the paper. Dr. Johnson moved, seconded by Dr. Eaddy, that the news media be requested to clear such information through Dr. Joe Waring or the speaker in future coverage. This motion was put and carried.

Departing words by various members of Council were received. Dr. Harrison Peeples, Vice President, expressed his satisfaction of having been associated with Council during the past year; and, in turn received commendation from various members of Council.

Dr. Eaddy thanked Council for its cooperation during the year as president. He received thanks and commendation from Council.

Dr. Perry, Chairman of Council, also thanked the body for assistance during the past year and there was a general expression from Council thanking it's Chairman.

Council adjourned at 9:30 a.m.

Ben N. Miller, M.D.

May 15, 1968

The final meeting of Council, SCMA, held in conjunction with the annual meeting was held in the Forest Room, Ocean Forest Hotel, Myrtle Beach, South Carolina, on May 15, 1968 at 8:30 a.m. Dr. William L. Perry, Councilor from the Sixth District and retiring Chairman of Council, called the meeting to order.

The following members were present: Dr. William L. Perry, Chairman of Council and President-Elect, SCMA; Dr. Clay W. Evatt; Dr. Waitus O. Tanner; Dr. John P. Booker; Dr. Michael Holmes; and, Dr. Harold Hope.

Dr. Joel W. Wyman, President, SCMA; Dr. Ben N. Miller, retiring Secretary; Mr. M. L. Meadors, Executive Secretary and Counsel; and, Dr. J. Hal Jameson, President, S. C. Medical Care Plan.

Dr. D. Strother Pope, newly elected Secretary; Dr. C. Tucker Weston, Vice President; and, Dr. John D. Gilland, newly elected Councillor from the Sixth District; and, Dr. Thomas Parker, newly elected Delegate to the AMA (term of office beginning January 1, 1969), were also present.

In complinace with the Constitution which provides that Council shall meet within sixty (60) days from the time of the annual meeting to appoint committees for the SCMA, Council voted to meet July 10, 1968, at 2:00 p.m. at the State Board of Health facility in Columbia for this

purpose (notices will be sent to Council by Mr. Meadors' office).

At an earlier meeting of Council, the advisability of the President of the SCMA continuing to give an annual President's Party for members of Council and friends was discussed. It was the consensus of Council that this was an imposition on the President, and it was moved by Dr. Booker, seconded by Dr. Holmes, that the President is not obligated to hold such a social function. It was the consensus of the discussion that this should be omitted from the functions of the annual meeting. The motion was put and carried.

Mr. Meadors announced that it had been the action of Council that the next annual meeting would be held May 11 to May 14, 1969, at the place designated by the House of Delegates, Ocean Forest Hotel, Myrtle Beach, South Carolina. Council voted to leave it with the President and Executive Secretary to arrange appropriate dates for the annual meetings 1979 and 1971.

Council moved into the area of reorganization of Council and Dr. Jameson nominated Dr. John Booker as Chairman of Council. The nomination was seconded by Dr. Tanner and he was duly elected.

The newly elected members of Council were recognized by the Presiding Officer and each expressed pleasure at being associated with Council. Dr. Gilland, Councilor fro mthe Sixth District; Dr. Tucker Weston, Vice President of the State Society; and, Dr. Strother Pope, Secretary. Dr. Thomas Parker, Delegate to AMA (January 1, 1969). The Secretary received commendation from Council on completion of his duties as Secretary to Council for the past six years.

Dr. Joel Wyman, President, SCMA, urged members of Council to acquaint themselves with the inroads by socialized medicine into the private practice of medicine and act as informers to the practitioner back home.

Dr. Strother Pope urges members of Council and profession to acquaint themselves with their local Representatives and exert influence in the halls of the Legislature.

Dr. Tucker Weston commented on SCALPEL's place in this sphere of politics.

Dr. Booker, acting in his role as new Chairman of Council, continued with the reorganizational meeting. Under the election of Vice Chairman of Council, Dr. Jameson nominated Dr. Martin Teague to continue in this post. He was elected.

Dr. Gilland, new member of Council, was elected as Clerk.

Dr. Perry took this occasion to thank Dr. Evatt for his kind remarks from the floor of the House of Delegates at the conclusion of the election for President-Elect of the South Carolina Medical Association yesterday.

Council adjourned at 9:00 a.m.

Ben N. Miller, M.D.

MEETINGS

The Second Postgraduate Seminar on Medicine for Internists and General Medicine for Internists and General Practitioners is scheduled for October 2 and 3 at the Medical College of South Carolina.

The Sixteenth Biennial International Congress sponsored by the International College of Surgeons will be held in Tokyo, Japan beginning October 6.

The congress is open to doctors from all over the world who wish to attend. The registration fee is $80.00. Inquiries can be addressed to: XVI Biennial International Congress, International College of Surgeons, 1516 N. Lake Shore Drive, Chicago, Ill. 60610



Dr. Raymond E. Ackerman, director of the Charleston County Mental Health Clinic since 1965, has been appointed deputy commissioner for the State Department of Mental Health. He will be in charge of community mental health services. **Dr. Alex Heise** of Sumter was elected by SCMA as member of the Tuberculosis Control Advisory Committee to the State Board of Health. South Carolina physicians who participated in the scientific sessions at the annual meeting of the South Carolina Heart Association include **Drs. Peter Gazes, William Lee, Arthur Williams, Grady Hendrix, Arno R. Hohn, R. R. Bradham**, all of Charleston; **Dr. Edward Floyd** of Florence, **Dr. Donald E. Saunders Jr.** of Columbia and **Dr. E. Conyers O'Bryan** of Florence. Among the new officers are **Dr. Gazes, president; Dr. Saunders**, president-elect; **Dr. Charles P. Summerall III**, vice president and **Dr. David G. Askins Jr.**, secretary. Elected to the board were **Dr. Lea B. Givens, Dr. C. Warren Irvin Jr., Dr. Arthur G. Meakin, Dr. Frederick E. Nigels Jr., Dr. Samuel H. Sandifer, Dr. John D. Ashmore Jr., Dr. William S. Houck Jr., Dr. Roy A. Howell, Jr. and Dr. R. O. Burgess.**

Dr. Charles E. Stark who has been associated with **Dr. Richard Jackson** and **Dr. Holmes Springs** since January is now on the surgical service of Ocean View Memorial Hospital, Myrtle Beach. He was graduated from the Medical College of South Carolina and interned at Spartanburg General Hospital. **Dr. H. Eugene Butler** of Myrtle Beach has passed board examinations for certification in internal medicine. He was graduated from the Medical College of South Carolina, interned at Columbia Hospital and took his residency at the Medical College. He is in private practice with **Dr. Fred Nigels** in internal medicine and cardiology, and is on the staff of Ocean View Memorial Hospital. **Dr. James L. Hughes**, medical director for Springs Mills in Chester, has been named to the board of directors of the Industrial Medical Association. **Dr. James W. Reid** of Charleston, a Navy lieutenant commander, is serving in hospitals in Viet Nam under the volunteer program. **Maj. Frank W. Berry Jr.**, physician from Rock Hill, recently received a "Service to Mankind" award from his home town for four tours of duty in Viet Nam. **Dr. W. H. Young**, Anderson physician, was recently named recipient of the "Practitioner of the Year" award presented by the Palmetto Medical, Dental and Pharmaceutical Association at its annual meeting in Spartanburg. **Dr. Thomas T. Galt** of Spartanburg has been elected president of the Medical Alumni Association of the Medical College of South Carolina. **Dr. Walton C. Ector** of Charleston was named president-elect, **Dr. William P. Turner** of Greenwood, vice president. Directors re-elected include **Dr. William Strohecker** of Columbia, **Dr. Joseph M. Brice Jr.** of Rock Hill and **Dr. Henry Frierson** of Orangeburg. **Dr. James Underwood** of Newberry was elected a director to fill an unexpired term.

Dr. W. J. Shealy of Florence and **Dr. M. B. Nickles** of Hartsville have been elected new members of the board of directors of the Pee Dee Area Big Brother Association. Steve Compton of Greenville, a Carolina High senior, was presented a check this spring by the Greenville County Medical Auxiliary for placing in the national essay contest of the Association of American Physicians and Surgeons Inc.

At the Spring Meeting of the South Carolina Society of Anesthesiologists, in Myrtle Beach, **Dr. John D. Thomas** was elected to serve as a delegate from the South Carolina Society of Anesthesiologists to the annual meeting of the American Society of Anesthesiologists to be held in October, 1968 in Washington, D. C. **Dr. William Middleton, Jr.**, was elected Vice President of the Society.

Dr. Harry A. Davis Jr. of Sumter has been re-elected to membership in the American Academy of General Practice. **Dr. T .L. Tiller Jr.** of Greenville has been elected to the Board of Directors of Wofford College Alumni Association. **Dr. Elijah Maxie Hicks** of Florence received the Sullivan Award recently at ceremonies at Furman University. The award is given for high aspirations and noble, humanitarian qualities of character.

FROM THE HOSPITALS

Construction of a $1.5 million Diagnostic and Treatment Center addition to **ANDERSON MEMORIAL HOSPITAL**, Anderson, will begin in the next several months. The three-story unit will house expanded facilities for treatment of intensive care and cardiac patients, outpatient clinic, physical therapy, and occupational therapy.

The new **BYERLY HOSPITAL**, Hartsville, was expected to be completed June 1. Upon completion, the new four-story hospital will have a 96-bed capacity.

CHESTERFIELD COUNTY MEMORIAL HOSPITAL, Cheraw, accredited by the Joint Commission on Accreditation for the first time this year, held a special open house recently in recognition of the achievement.

COLUMBIA HOSPITAL, Columbia, has received a federal grant of $34,201 for a cervical cancer screening project. The project will provide Pap smear tests for cancer as a routine examination procedure for indigent patients.

A bill permitting a November referendum to authorize issuance of $25 million in bonds for hospital construction in Greenville County was passed by the General Assembly. If the bond issue is approved, the $25 million will be used to provide a new 600-bed **GREENVILLE GENERAL HOSPITAL**, expansion of **ALLEN BENNETT MEMORIAL HOSPITAL**, and a health care facility in upper Greenville County.

ST. FRANCIS XAVIER HOSPITAL, Charleston, has announced plans to undertake a construction program which will double the hospital's present capacity. The first phase of the expansion program, to begin in about ten months, will add 150 beds to the present 147 beds.

Work has begun on the construction of the new 8-story Elliott White Springs Memorial Hospital in Lancaster. The new hospital, planned for an initial 106 beds, all in single occupancy rooms, will be built in front of **MARION SIMS MEMORIAL HOSPITAL**. The new Springs Memorial will become the acute general care unit in a three-unit medical complex. Marion Sims will becom a long term care unit, and Grace White Memorial will serve as a convalescnt and extended care unit.

The new **MARY BLACK MEMORIAL HOSPITAL**, Spartanburg, was dedicated this spring. Dedication speaker was Dwight L. Wilbur, M.D., president-elect of the American Medical Association. The first patients were admitted to the new 103-bed progressive patient care hospital on May 1.

EPITAPH FOR A SOUTH CAROLINIAN

By Robert Quinn, M.D.

Of all I own
One thing alone
I'd like to always keep:
Somewhere nearby
A pine to sigh
So I may soundly sleep.

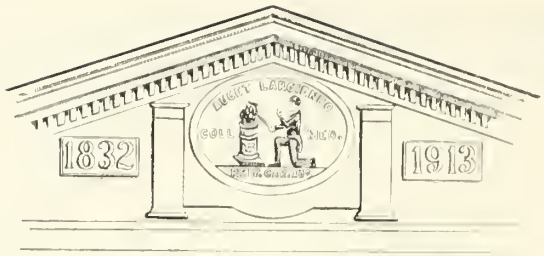


It won't do the job.

Neither will protection which pays for only a small portion of hospital and/or surgical costs.

Blue Cross and Blue Shield pre-payment plans are today's best answer for surgical and hospital protection.

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Medical College of South Carolina

An exhibit from the Department of Urology was awarded a first prize at the recent annual meeting of the American Urological Association in Miami Beach, Fla. Receiving the award were **Dr. Fletcher Derrick Jr., Dr. Obie Stalcup, Dr. Lester Neville** and **Dr. William Turner Jr.**

The exhibit was titled, "Fluorescence Microscopy of Urinary Sediment." It depicts a new procedure tha can be used in the attending physician's office. It is a screening process that provides rapid determination of the specific urinary tract infection.

Dr. Carter Maguire, Clinical Associate in Surgery, has been elected President of the Southeastern Society of Plastic and Reconstructive Surgeons. He was installed in the position on May 31, in Biloxi, Miss.

Dr. Charles D. Graber, Associate Professor of Microbiology, chaired a round table talk at a recent meeting of the American Society of Microbiology in Detroit, Mich.

The topic of the discussion was, "Programmed Instruction in Medical School Microbiology." **Dr. Thomas E. Rogers,** Assistant Professor of Bacteriology, also participated in the program.

Dr. O. Rhett Talbert, Professor of Neurology, chairman of the Division of Neurology, Department of Medicine, was the guest "Consultant" in May issue of "Medical Tribune." As Consultant, he answered in print questions relating to neurologic seizures, hypsarrhythmia and hypotension, diabetes in the aged.

Dr. Daryle L. Waldron has been appointed as Associate Editor for DSH Abstracts. This quarterly Journal is a publication of Deafness, Speech and Hearing Publications, Inc., an organization founded by the American Speech and Hearing Association and Gallaudet College.

Dr. Forde A. McIver, presented a paper on, "The Results of Inhalation Exposure of Dogs to Crhysotile Asbestos", at the Second International Conference on the Biological Effects of Asbestos held in Dresden, Germany in April.

Dr. J. G. Ward presented a paper on "The Juvenile Polyp" at the S. C. Academy of Science. The paper was done in collaberation with **Dr. Biemann Othersen.**

Dr. John E. Mahaffey presented a lecture on Methoxyflurane (Penthrane) this month to the Southeastern Hospital Conference in Atlanta, Georgia.

One hundred thirty-six diplomas were awarded on June 6 at the 139th Commencement of the Medical College of South Carolina held in The Armory of the Citadel.

Sixty-six M.D.'s were awarded, and 27 students received B.S.'s in Pharmacy. Thirty-three received graduate nurse diplomas, and three students were awarded M.S.'s and two received Ph.D.'s Five B.S.'s in the Allied Health Sciences were awarded for the first degrees earned from the School of Allied Health Sciences, which was organized in 1966.

Lt. Gov. John C. West presented the commencement address. Candidates for degrees were presented by their deans with Dr. William M. McCord, President, conferring degrees and titles. Mr. J. Edwin Schachte, Jr., Chairman of the Board of Trustees of the Medical College presented the diplomas.

A special certificate honoring his serv-

ice was presented to Mr. Julian T. Buxton, Sumter, who is retiring from the Board of Trustees.

Dr. Leon McDill Allison, Dean of Erskine Theological Seminary, presented the invocation and benediction.

Needham Joseph Thompson of Columbia was named first honor graduate in the School of Medicine.

Robert Barry Grove of Rock Hill was named second honor graduate.

Betty Lou Corbett, Manning, was named first honor graduate of the School of Nursing with Jeannine Carroll of Columbia receiving second honors.

Freeman Kirby, of Supply, N. C., was named first honor graduate of the School of Pharmacy. Fred Norman, Clemson, received second honors for the school.

DOCTORS OF MEDICINE

Virginia Marie Anderson, Brooklyn, N. Y.; Perry William Aycock, Jr., McConnells; Samuel Arthur Black, Charleston; Alton Grady Brown, Jr., Rock Hill; William Yongue Buchanan, Jr., Winnsboro; William Joseph Burk, III, Charleston; Michael DeFoix Caldwell, Columbia; Victor Clyde Campbell, Spartanburg; Gerald McCall Chambers, York; Malcolm Osbourne Corley, Columbia; Joel Robert Cox, Jr., Clinton; Uriel X. Cullum, Jr., Batesburg; Garfield Woodruff Danenhower, III, Pendleton; Roger Allen Davis, Hemingway.

Thomas Bennett Eison, Greenville; James Edward Farr, Jr., Greenville; Harry Wells Floyd, Olanta; William Julian Fogle, III, Columbia; Carl McDonald Foster, Columbia; Frederick Lybrand Fowler, Jr., Greenville; John Michael Foxworth, Orangeburg; James Dale Gould, Greenville; Robert Barry Grove, Rock Hill; Phil Lanier Hadaway, Jr., Walterboro; Byron Blasdell Harder, Jr., Sumter; John Aberdeen Harrill, Jr., Anderson; Jerry Eugene Jackson, Sumter; Chester Wright Jenkins, North Augusta; James Wimberly Kellett, Greenville.

James Haynes Kelly, Charleston; John Richard Langley, North Augusta; Wesley Willingham Lawton, Jr., Estill; Rodman Lemon, Jr., Barnwell; John Lindsay Leviner, Jr., Winnsboro; William Brownlee Lowry, Chester; Wilson Locke Lynch, Spartanburg; Robert Malanuk, Brooklyn, N. Y.; Thomas Emmett Mason, Ballentine; William David Meredith, St. George; Willie Bradford Moseley, Aiken; Samuel Lawrence Orr, Seneca; Vincent Petno, Uniontown, Pa.; Wendell Everett Phillips, Jr., Alpharetta, Ga.; James Patterson Pressly, II, Due West.

Daniel Ravenel, Winnsboro; James Ernest Reinhardt, Jr., Edgemoor; James Calvert Reynolds, Greenville; Clarence Milford Rogers, Anderson; John Roger Rowe, Walterboro; Jerry Jordan Sample, Ridge Spring; Joel Steven Sexton, Spartanburg; James Gaston Simpson, Chester; James David Smith, Anderson; John Bruce Steigner, Columbia; Hilliard Allen Strickland, Charleston; Needham Joseph Thompson, Jr., Columbia; Thomas Marion Verdin, III, Mauldin; Frank Reid Warder, Anderson; Douglas Wayne Whetsell, Bowman.

Carl Alexander White, Jr., Marion; Larry Butler White, Saluda; James Dudley Whitehead, Jr., Lake City; Luther Chase Williams, III, Lancaster; Thomas Bright Williamson, Darlington; William Chisolm Wilson, Charleston; William Joseph Yarbrough, Columbia.

With the help of the Alumni Assn., a list of the career preferences expressed by the members of the Class of 1968 of the School of Medicine has been compiled.

Academic Medicine	1	Surgery	
Cardiology	1	Cardiovascular	1
Cardiology (pediatric)	1	General	2
General Practice	6	Pediatric	1
Internal Medicine	9	Orthopedic	3
Obstetrics and		Urology	2
Gynecology	4	Undecided	
Oncology	1	Between specialties	2
Ophthalmology	2	Between general	
Otolaryngology	1	practice and a	
Pathology	3	specialty	6
Pediatrics	2	Expressed no	
Psychiatry	1	preference	14
Radiology	2	Did not reply	1

MEDICAL ETV

August 1—**DIGITALIS AND DIURETICS** (This program is devoted entirely to an in-depth discussion of two major measures of therapy, digitalis and the diuretics. Emphasis is placed on recent advances in the field, particularly the interrelationships with electrolytes and the newer diuretic agents, by a faculty of acknowledge authorities.)

Dr. C. Thorpe Ray, University of Missouri

Dr. Thomas Killip, Cornell University

Dr. Lamar E. Crevasse, University of Florida

August 15—**TRENDS IN AMERICAN MEDICINE** (We live in a time of profound changes in American medicine, as in our entire way of life. Both from within and without American medicine is confronted with pressures for new solutions

to new problems: the increasing complexity of our scientific knowledge with resultant trends toward more specialization and the team approach, the population explosion, our longer life expectancy, urbanization, the appalling toll of accidental deaths, the urgent need for more adequate control of our environment including radioactive, industrial and other contaminants of our air and water. Recent developments in genetics, in transplant techniques and in instrumentation have brought new medical horizons.)

Dr. Charles L. Hudson, Past-President American Medical Association

Dr. Kenneth Crispell, Dean, University of Virginia School of Medicine

Dr. George Dean Johnson, South Carolina Delegate to AMA

September 5 — **ANTICOAGULANT THERAPY** (A quarter century after its introduction, anticoagulant therapy remains one of the more controversial measures in medical practice. The literature is replete with statistics that prove, others that disprove its effectiveness. This program is essentially a debate—the pros and cons of the anticoagulants, with comments on some special neurological and other considerations of their clinical use.)

Dr. George C. Griffith, University of Southern California

Dr. T. Sterling Claiborne, Emory University

Dr. Hiram B. Curry, Medical College of South Carolina

The Department of Otolaryngology of the Illinois Eye and Ear Infirmary and the College of Medicine of the University of Illinois at the Medical Center, will conduct a postgraduate course in Laryngology and Bronchoesophagology from September 23 through October 4, 1968.

Interested registrants will please write directly to the Department of Otolaryngology, College of Medicine, University of Illinois at the Medical Center, Postoffice Box 6998, Chicago, Illinois 60680.

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MEETING THE CHALLENGE OF THE TUBERCULOSIS HOSPITAL TODAY

E. KENNETH AYCOCK, M. D.
DAVID B. GREGG, M.D.
Columbia, S. C.

Following the death last year of Dr. Rudolph Farmer, superintendent of the South Carolina Sanatorium, the governor appointed a committee to determine the future plans of the Sanatorium. The committee was composed of Dr. William McCord, president of the Medical College; Dr. Dill Beckman, director of the State Vocational Rehabilitation Department; Mr. Burnell Sloan, current chairman of the Sanatorium Board; Mr. William Wilson, president of the South Carolina Tuberculosis Association; and Dr. E. Kenneth Aycock, state health officer, as chairman. It is the purpose of this paper to inform the medical profession of some of the principles involved in the recommendation to the governor.

Upon the recommendation of the governor following this report, enabling legislation was introduced and has now been approved by the House and Senate transferring all properties and operations of the South Carolina Sanatorium back to the State Board of Health effective July 1, 1968.

The legislation also provided for an advisory committee to advise the State Board of Health on matters pertaining to the operation of the hospital and tuberculosis control. This committee would be composed of six members, with two practicing physicians (one from the South Carolina Thoracic Society and one from the South Carolina Medical Association), one representative each from the South Carolina Tuberculosis Association, the Public Welfare Department, and the Vocational Rehabilitation Department, and the current chairman of the Sanatorium Board. This is the culmination of one of the recommendations of a 1962 Study Committee on Tuberculosis Treatment Facilities and Services in South Carolina Chairmanned by Dr. Martin Teague.

The role of the hospital in tuberculosis control has undergone rather dramatic change since the advent of the chemotherapy era. Through the 1940's the hospital completely dominated the treatment role, and one of the major problems during that time was the lack of a sufficient number of beds to provide treatment. Then streptomycin arrived on the scene in the late forties, to be followed soon by PAS and, even more dramatically, isoniazid in the early 1950's. Suddenly in the fifties there was a sufficient number of beds to obliterate all waiting lists, by the sixties tuberculosis hospitals were closing, and there was a declining census in those remaining open. The number of patients in our State Sanatorium fell from well over 500 in the mid-fifties to a present level of around 250.

During this same period outpatient care for tuberculosis patients has become a reality. Today over 3,000 cases are being supervised at home, nearly 500 are continuing drug treatment, and 4,000 household and other close contacts are being followed, with some 1,500 receiving prophylactic treatment with isoniazid. In addition 2,600 other persons at high risk of developing tuberculosis are also on prophylactic treatment in outpatient clinics.

With these far-reaching changes in the treatment of tuberculosis, it is understandable that many foresee the end of the hospital directed solely to the care of tuberculosis. However, those of us presently involved in South Carolina see the continued need for readily available hospitalization for the newly diagnosed patients



State Tuberculosis Sanatorium —Photo by Powell

ill with tuberculosis and those with reactivation and in need of intensive multiple drug therapy or surgical intervention—certainly beyond the capacity of the presently crowded general hospitals.

Also, although the case rates are relatively lower, those occurring are increasingly found in the older age groups in whom other ills are common, with many of these other ills being chronic pulmonary diseases. Chronic bronchitis, emphysema, lung cancer, and diseases due to atypical mycobacteria are actually increasing and as a matter of differential diagnosis are already finding their way into our tuberculosis hospital.

During the past half-century we have made great health progress. Indeed, the trends of modern medicine are breathtaking. All of this change and improvement in the health care of the patient has brought with it increased specialization and increased fragmentation of health services.

This specialization and fragmentation of medical practice need not be a deterrent to good medical care—to be sure, it has been both the reason for and the result of improved health care to our people. However, we must be aware of the ever-constant problems which specialization and fragmentation bring. We must accept the fact that no one person can supply all the patient's needs and certainly no one doctor can supply all the patient's medical care.

Therefore, we must plan for a health care system which will allow for specialization and fragmentation and yet provide improved individual patient care. We must provide for an administrative framework that will not only enhance the interplay and interchange of different professional disciplines, but which will greatly improve the individual patient's care by doing so. We must create an environment that will lead to interdisciplinary working relationships—for the health care which these patients will need must be rendered by many professionals; by physicians, nurses, physical therapists, vocational rehabilitation counsellors, public

health nurses, social workers, and others.

Of the approximately 250 patients at the South Carolina Sanatorium, some 40 have chronic respiratory diseases other than tuberculosis and approximately one-third of the patients hospitalized there with tuberculosis have other complicating chronic diseases. It has been estimated that some 10,000 persons in our state are now suffering from emphysema or chronic pulmonary diseases. In addition to those persons now suffering from chronic respiratory diseases, the number of persons who are functionally incapacitated physically or environmentally for extended periods of time is increasing and represents a health problem of the first magnitude. It has been our conviction that those persons who have chronic respiratory diseases requiring long-term health care and who are amenable to medical, social and rehabilitative treatment should be given prime consideration and that efforts should be made to make these services available to them now. In providing services we must be aware that just as preventive and health maintenance services constitute one end of the spectrum of comprehensive personal health care, rehabilitation—the establishment of social functioning in daily life—represents the other.

We must improve both continuity of care and quality of care. In our patient-centered tuberculosis and chronic respiratory disease program, in which the State Sanatorium will play such a vital role, we must look for the high quality of medical care that might be provided if we could make available to our patients all existing knowledge, skills, and optimal resources available for our use. We, the State Board of Health, hope and expect to be greatly aided in this by local physicians and by our state Medical College.

We see this State Tuberculosis Sanatorium as presenting a challenge for a model of comprehensive health planning in action. Let us not forget that in providing for the total well-being of our patient, we must look outside the walls of the facility to see how we can further improve his health. This is especially true as we consider tuberculosis and chronic respiratory diseases. Most health professionals focus their immediate responsibilities on disease, but the fate of the population's health is closely intertwined with issues that have not been identified primarily as health issues. Health cannot be considered apart from environmental, social, and economic influences, all of which have such a vital interplay as regards the total health services needed in the control and treatment of tuberculosis and other chronic respiratory diseases.

Through the proper use of the health facilities at the State Sanatorium and in the development of a patient-centered health care program for those persons suffering from chronic respiratory disease, by the establishment of meaningful levels of patient care in the hospital facility for acute disease, the extended care facility, the nursing care facility, the outpatient community clinic, and by successfully integrating and coordinating the services of medical and paramedical personnel, we sincerely and earnestly hope that the care rendered at this institution will be a beacon for defining comprehensive health services to at least one segment of the population, i.e., those persons suffering from chronic respiratory diseases.

Just as we cannot be satisfied with the old care rendered these patients, so we must diligently work to find better ways of providing new and improved care. Thereby we wil show that the function of comprehensive health planning is not only to improve the health services available, but to continually strive to meet the total health needs of those persons suffering from chronic respiratory diseases.

Some of the specific plans which are now in the making include upgrading and

broadening the range of medical and ancillary services for the patients. Some of the details for effecting this are to employ a medical director well trained in respiratory diseases and with leadership qualities to head up the medical staff for the patients' medical care, and a hospital business manager to be responsible for the physical facilities and fiscal matters instead of the former more comprehensive position of superintendent.

Securing consultative services in all specialty fields from physicians in the Columbia area is to be explored. All consultative and other services of the Medical College will be utilized to the fullest extent.

To have the kind of hospital service that will attract young physicians desirous of furthering their experience and knowledge of respiratory diseases will be an objective.

This leads to the facet of the plan to broaden the hospital services beyond the treatment and isolation of tuberculosis. Since tuberculosis is becoming more and more a disease of the aged, we are dealing with patients who are reaching the time of life when many ills occur, and the fact that tuberculosis is present does not exclude these other ills. Chronic bronchitis and emphysema are high on the list of these ailments, and prospects are for increasing numbers. Facilities and personnel for diagnosis, evaluation of disability, therapy and rehabilitation services for chronic obstructive pulmonary diseases should be available. Although diagnostic and treatment facilities should be available for all diseases, tuberculosis should receive first priority with our present problem, and other chronic pulmonary diseases should likely fill in the balance for the present with expansion in this area as the tuberculosis incidence declines.

Plans are to have the hospital certified for participation in all federally funded medical programs as a source of increased financial support for the expanded services. Reorganization of the physical facilities to provide three levels of care is anticipated. Eventually, general-hospital-type services will be provided in one building in which a relatively short stay would be expected, extended nursing care in another from which most will be discharged, and, for certain types of patients who cannot be readily restored to normal activity, domiciliary care in a third area. This would be ideal not only from a patient-care standpoint, but would enable the greatest economy of patient care and financial help to be obtained from federal medical welfare programs. It has been calculated that under such a system nearly half a million dollars could be accrued to the hospital operation from the around 125 patients now in the hospital over 65 years of age.

Plans are to coordinate the hospital services with the chest clinics in the health departments now caring for the tuberculosis patients after leaving the hospital. It is a fair guess to say that three-fourths of the drug treatment of tuberculosis patients is now being given after hospital discharge, if indeed they were hospitalized at all. It is hoped that some of the same professional staff can supervise the patient in the hospital and in the county chest clinic after discharge in many areas. There would be coordination of the hospital, public health and tuberculosis project nurses to improve nursing service.

Combining the laboratory services of the Sanatorium with the Division of Laboratories of the State Board of Health should bring about improvement and economy in this area. This would provide qualified medical supervision specifically for the laboratory—which has never existed before.

Increasing the role of the Vocational Rehabilitation Department and allied social services in the hospital is a long-felt need. Without the valuable aid of these related health services, the goal of estab-

lishing complete social functioning again on the part of the disabled person would be impossible.

We are confident at the State Board of Health that with the full cooperation of the Advisory Committee for Tuberculosis Control and the Advisory Council for Comprehensive Health Planning in South Carolina we will find ways to "move the mountains" in meeting the challenge of the tuberculosis hospital if the numerous agencies involved, the physicians, and all the interested citizens help to level some of the hills.

The first U. S. licensed and produced antivenin to combat the potent poison from the North American eastern coral snake has been developed and is now available in the nine states where coral snakes are found. Wyeth Laboratories, Philadelphia pharmaceutical manufacturer, has donated as a public service enough Antivenin (Micrurus fulvius) to treat patients bitten by the eastern coral snake.

The polyvalent preparation now in use does not contain the antivenin for the coral snake. The availability of the new preparation now makes identification of the snake especially important.

Supplies of the antivenin are maintained at the Poison Control Centers in Charleston and Columbia and the State Board of Health Office in Columbia.



"You're a legend in your own time, Doctor—still making house calls."

Drivers Licenses

A new attack has been launched on the problem of providing a more adequate method of determining the fitness of applicants for driver's licenses. The spearhead of the attack is a new guide, "Determination of Need for Medical Evaluation in Driver Licensing," just developed by the AMA Committee on Medical Aspects of Automotive Safety.

This guide, aimed at non-medical licensing authorities, suggests a screening procedure to be used on all license applicants, with only those seeming to present an unwarranted risk as drivers being required to have an examination by a physician. To do such screening effectively, lay licensing authorities will have to have medical advice and guidance. The Committee on Medical Aspects of Automotive Safety suggests that state medical association committees on automotive safety work very closely with state licensing authorities and also with county medical societies.

In addition to improving licensing procedures, the AMA Committee feels that this new guide will go a long way toward eliminating agitation for legislation which would require medical examinations for all drivers, as well as that which proposes compulsory reporting by physicians of conditions in their patients which might make driving unsafe. Both of these principles have been opposed by the medical profession for many reasons, principally that they are unworkable. In addition, the compulsory reporting proposal is felt to interfere with the confidentiality of medical records as well as with the traditional physician-patient relationship.

"Determination of Need for Medical Evaluation in Driver Licensing" was published originally in the March 4th issue of The Journal of the American Medical Association, and reprints were distributed April 5 to state medical associations. Individual copies may be obtained from the Committee on Medical Aspects of Automotive Safety, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

The Pee Dee area of South Carolina, together with parts of North Carolina and Georgia, has more deaths from stroke than any area in the world, according to a report made to the American Heart Association in San Francisco in October, 1967.

DEATH

Dr. Joseph M. Brice

Dr. Joseph M. Brice, 65, Kingstree physician, died May 9 at the Williamsburg County Hospital.

Dr. Brice was born Feb. 4, 1903, in Orangeburg County. He attended Erskine College and the University of South Carolina and was graduated from the Medical College of South Carolina in the Class of 1926.Dr. Brice did postgraduate work at Baltimore City Hospital and the University of Maryland. He served as resident surgeon at James Walker Memorial Hospital in Wilmington, N. C.

Dr. Brice had practiced medicine in Kingstree since 1930. At the time of his death, he was chief of staff at Williamsburg Memorial Hospital. He was a member of the American Medical Association and the S. C. Medical Association. He was a member of Williamsburg Presbyterian Church and was on the board of directors of Williamsburg First National bank.

NEWS

The Greenville County Legislative Delegation recently gave its approval to a bill which will set up a three-member County Medical Commission and grant this body authority to hire a county medical examiner.

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Make tuberculin testing routine with every physical examination.



TUBERCULIN,TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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Heart Association Grants

Under the chairmanship of Dr. Charles Summerall of the Medical College of South Carolina, the South Carolina Heart Association's Research Committee has developed new policies and procedures governing grants to medical scientists in this state. Information on the grants and application forms may be obtained from the Heart Association, P. O. Box 5937, Columbia, S. C. 29205. Deadline for submitting applications to the Committee is September 1. Approved grants will be activated January 1, 1969.

General requirements are that applicants must have post-doctoral degrees and contemplate significant basic or cardiovascular research in a non-profit institution with adequate facilities for their work. Although the Heart Association's policies cover both fellowships and grants-in-aid, funds are adequate to support only a limited number of grants-in-aid at present.

This research program is separate from that of the Amedican Heart Association, which also makes research awards to scientists in South Carolina. Those interested in the national program may write to the Director of Research, American Heart Association, 44 East 23rd Street, New York, N. Y. 10010.

Both the American and South Carolina Heart Association's research programs are financed by public contributions to the annual Heart Fund campaign.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

LORIDINE

Antibiotic—B & M Spectrum Rx

Manufacturer: Eli Lilly & Co.

Nonproprietary Name: Cephaloridine

Indications: Serious infections of the respiratory and genito-urinary tract (including gonorrheal urethritis in the male), infections of bones and joints, bloodstream, soft tissue, and skin.

Contraindications: Hypersensitivity to it or to cephalothin, azotemia. Should not be used to initiate therapy unless culture and sesitivity tests show susceptibility to it.

Dosage: Adults—250 mg to 1 Gm, two to four times daily, im or iv. Children—30 to 100 mg/kg body weight, in divided doses, im or iv, not to exceed recommended adult doses. Not for infants under one month of age.

Supplied: Vials—500 mg powder in 5 ml vial. 1 Gm powder in 10 ml vial.

MAGAN (Old cpd., first nat, mktg.)

Analgesic—Non-narcotic O-t-c

Manufacturer: Warren-Teed Pharmaceuticals

Nonproprietary Name: Magnesium salicylate

Indications: Rheumatoid arthritis, osteoarthritis, nonarticular rheumatism; pains, aches, and discomfort of headache, neuralgia, minor injuries, dysmenorrhea, common cold and other minor infections of the respiratory tract.

Contraindications: Advanced chronic renal insufficiency, concomitantly with uricosuric agents.

Dosage: Adults: one or two tablets q4h, with a full glass of water. Not for children under 12 years.

Supplied Tablets—325 mg; bottles of 250 and 1000.

SUBLIMAZE

Analgesic—Narcotic Rx

Manufacturer: McNeil Laboratories

Nonproprietary Name: Fentanyl citrate

Indications: Preoperatively, during, and in the immediate postoperative period; prevention or relief of tachypnea and postoperative emergence delirium.

Contraindications: Bronchial asthma, in children under two years, comatose patients with head injury or brain tumor, concomitantly with MAO inhibitors, history of myasthenia gravis.

Dosage: 1 to 2 ml, im or iv

Supplied: Ampuls—0.1 mg/2ml; boxes of 12 and 144.

DUPLICATE SINGLE PRODUCTS

ALBUSPAN

Hospital Solution Rx

Manufacturer: Parke, Davis & Co.

Nonproprietary Name: Albumin, Normal human serum

Indications: Shock due to burns, trauma or crushing injuries in which loss of red corpuscles is not severe, treatment of excessive levels of bilirubin in the blood.

Contraindications: None mentioned.

Dosage: As indicated by physician.

Supplied: Solution—5%; bottles of 250 and 500 ml. 25%; bottles of 20 and 50 ml

DIAL-A-GESIC Syrup

Analgesic—Non-narcotic o-t-c

Manufacturer: Borden's Pharmaceutical Div.

Nonproprietary Name: Acetaminophen

Indications: Simple pain and discomfort caused by teething, headache, tonsillectomy, immunizations, other minor aches and pains, and to reduce fever of colds and flu.

Contraindications: Hypersensitivity to the drug.

Dosage: Under 1 year—½ tsp.
1-3 years—½ to 1 tsp.
3-6 years—1 tsp.
Over 6 years—2 tsp.

Supplied: Syrup—120 mg/5 ml; bottles of 3 fl. oz.

IMMU-Tetanus

Biological Rx

Manufacturer: Parke, Davis & Co.

Nonproprietary Name: Tetanus antitoxin, human

Indications: Immunization against tetanus

Contraindications: None mentioned

Dosage: As indicated

Supplied: Steri-Vials—250 units

SECO-8

Sedative & Hypnotic—Barbiturate Rx

Manufacturer: Fleming & Co.

Nonproprietary Name: Secobarbital Sodium

Indications: Insomnia, anxiety states, essential hypertension, nausea and vomiting of functional origin, congestive heart failure, pre-anesthesia hypnotic.

Contraindications: Tendency to addiction to barbiturates, history of porphyria, uncontrolled pain.

Dosage: One capsule at bedtime.

Supplied: Capsules, sustained release—100 mg.

COMBINATION PRODUCTS

INNOVAR

Analgesic—Narcotic Rx

Manufacturer: McNeil Laboratories

Composition: Each ml contains: Fentanyl citrate 0.05 mg. Droperidol 2.5 mg.

Indications: As premedication for anesthesia, and as adjunct to the induction and maintenance of anesthesia.

Contraindications: Bronchial asthma, in children under two years, myasthenia gravis, concomitantly with MAO inhibitors.

Dosage: Premedication—0.5 to 2 ml, im. Induction—1 ml/20-25 lbs., iv. Maintenance—0.5 to 1 ml, iv

Supplied: Ampuls—2 and 5 cc.; boxes of 12 and 144.

LUFYLLIN-GG Tablets

Bronchial dilator Rx

Manufacturer: Mallinckrodt Pharmaceuticals

Composition: Dyphylline 200 mg. Glyceryl guaiacolate 200 mg.

Indications: Acute and chronic bronchitis, asthmatic bronchitis, emphysema or other conditions in which reversible bronchospasm exists.

Contraindications: None mentioned.

Dosage: Adults—one tablet 3 or 4 times daily. Children over 6 years—not to exceed 10 mg/kg/day in divided doses. Not for children under 6 years.

Supplied: Tablets—bottles of 100 and 1000.

X-NOG

Diagnostic—Other o-t-c

Manufacturer: Borden's Pharmaceutical Div.

Composition: Protein 3.3%
Fat 8.6%
Carbohydrate 13.7%
Minerals 0.7%
Moisture 73.7%

Indications: As gallbladder stimulant replacing fatty foods in routine cholecystography.

Contraindications: None mentioned.

Dosage: 4 fl. oz.

Supplied: Cans—8 fl. oz.

NEW DOSAGE FORMS

LUFYLLIN-GG Elixir

Bronchial Dilator Rx

Manufacturer: Mallinckrodt Pharmaceuticals

Composition: Each 15 ml contains: Dyphylline 100 mg. Glyceryl guaiacolate 100 mg.

Indications: Acute and chronic bronchitis asthmatic bronchitis, emphysema or other conditions in which reversible bronchospasm exists.

Contraindications: None mentioned.

Dosage: Adults—two tbsp. 3 or 4 times daily. Children over 6 years—not to exceed 10 mg/kg/day in divided doses. Not for children under 6 years.

Supplied: Elixir—bottles of 1 pint and 1 gallon.

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Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
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Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

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* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic? We'll send you samples if you'll send a request on your Rx blank, addressed to Department 150.)

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In trichomonal vaginitis, most physicians have reported a cure-rate of 95 per cent or more with Flagyl when infected male partners are treated concurrently and when treatment is repeated for occasional refractory infections in women.

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This high rate of cure obtained with Flagyl is unparalleled. Only systemically active Flagyl reaches the hidden reservoirs of reinfection in male and female genitourinary tracts.

Indications: Flagyl is indicated only in the treatment of trichomoniasis in both the male and female.

Contraindications: Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution: Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side effects: Infrequent and minor side effects include nausea, metallic taste and furry tongue. Gastrointestinal disturbances, flushing and headache sometimes occur, especially with concomitant ingestion of alcohol. The taste of alcoholic beverages may be altered. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness or paresthesia of an extremity, joint pains, confusion, irritability, weakness, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

Dosage and Administration: In women: one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

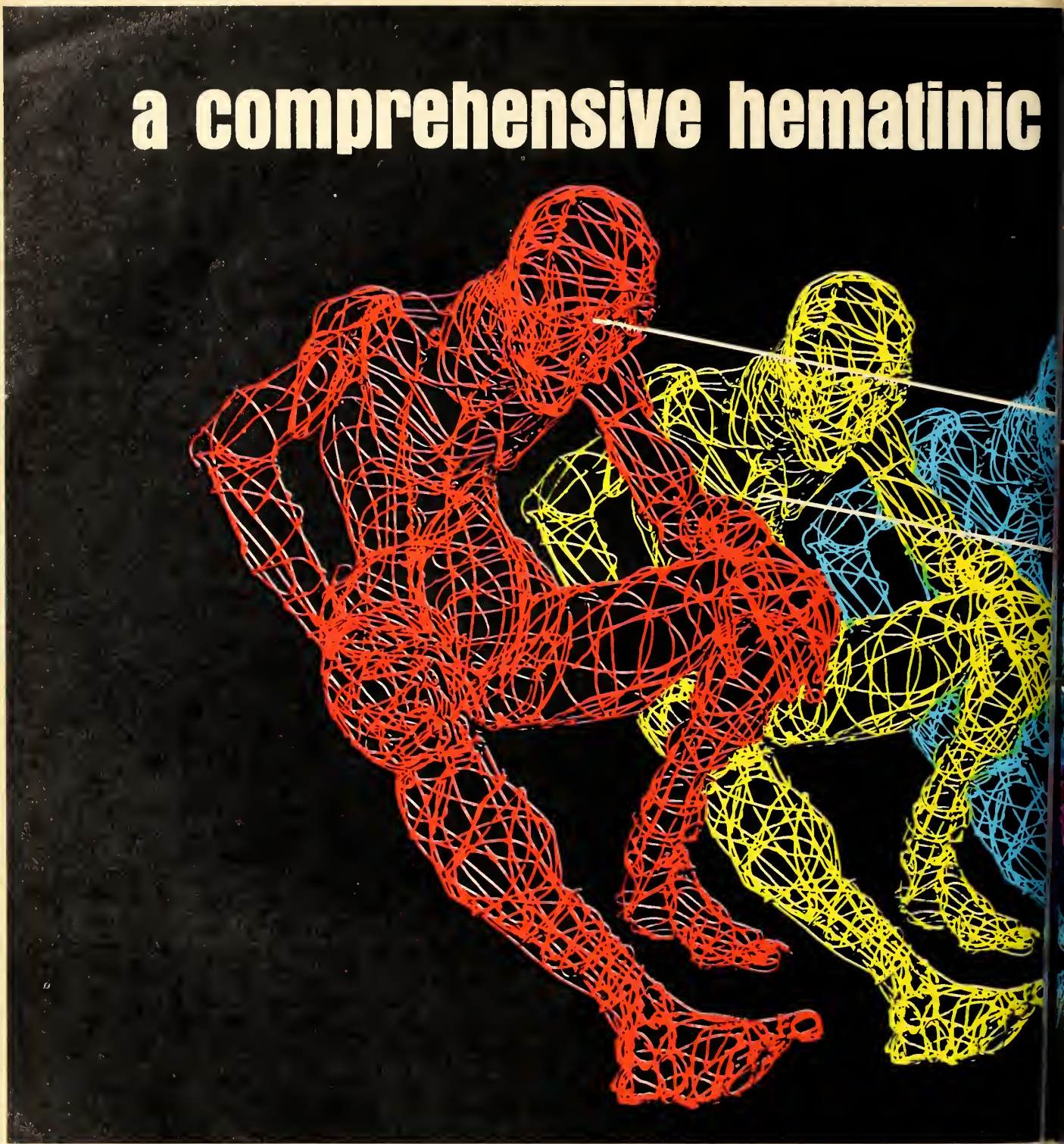
In men: When trichomonads are demonstrated, one 250-mg. oral tablet twice daily for ten days in conjunction with treatment of his female partner.

Dosage Forms: Oral tablets—250 mg.
Vaginal inserts—500 mg.

SEARLE

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Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	1 mg.

Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires approp investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without adeq vitamin B_{12} therapy may result in hematologic remission but rological progression. Adequate doses of vitamin B_{12} (parent or oral with potent intrinsic factor as in Trinsicon® [hema concentrate with intrinsic factor, Lilly]) usually prevent, hal improve the neurological changes.

As with all preparations containing intrinsic factor, resist may develop in some cases of pernicious anemia to the pote tion of absorption of physiological doses of vitamin B_{12}. If re ance occurs, parenteral therapy, or oral therapy with so-c massive doses of vitamin B_{12}, may be necessary. No single men fits all cases, and the status of the patient observe follow-up is the final criterion for adequacy of therapy. Per



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Vitamin B_{12} plus intrinsic factor (15 mcg B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

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ical and laboratory studies are considered essential and are recommended.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastro-intestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects.

In extremely rare instances, skin rash suggesting allergy has followed oral administration of liver-stomach material. Instances of apparent allergic sensitization have also been reported after oral administration of folic acid.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.
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the antacid puzzle

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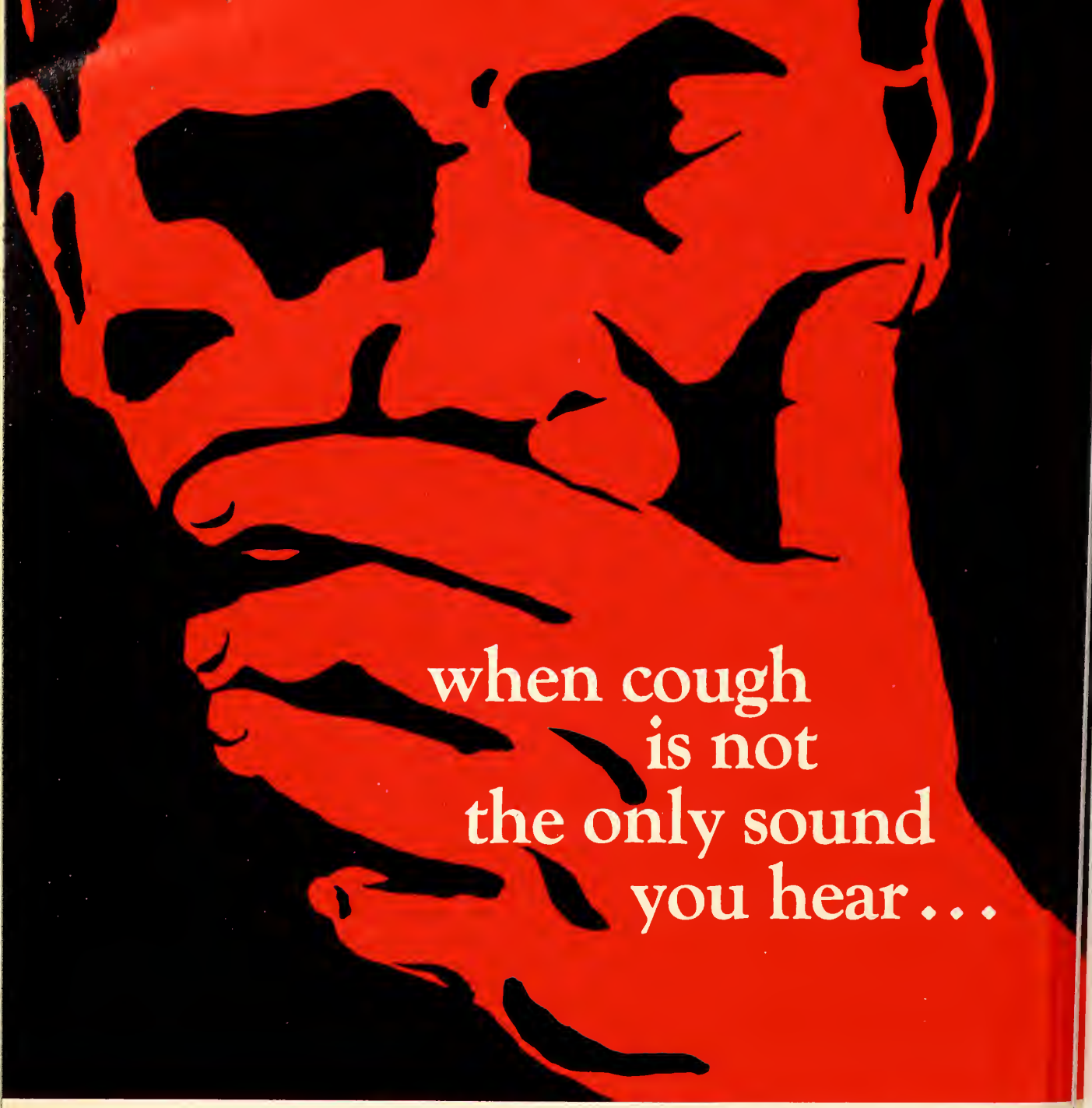
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. . . **because** OMNI-TUSS is indicated for cough associated with upper respiratory tract infections, bronchitis, bronchiectasis, bronchial asthma, emphysema, sinusitis and rhinitis, hay fever, or other allergic conditions. Any of these conditions may exhibit the general symptom syndrome—coughing, wheezing, bronchospasm, and tenacious mucus—which may benefit from the antitussive, bronchodilative, antihistaminic, and expectorant action of Omni-Tuss.

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Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

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Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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When asthmatic bronchitis is complicated by an "epicurean taste"

Prescribe ELIXOPHYLLIN®-KI. Its pleasant fruit-flavored vehicle disguises the bitter taste of potassium iodide. Moreover, ELIXOPHYLLIN-KI won't make young patients jittery or keep them awake at night. Unlike most bronchodilators, ELIXOPHYLLIN-KI does not contain ephedrine-like drugs. Other advantages: rapid and sustained bronchodilation; convenient, adjustable dosage; less risk of gastric upset. ELIXOPHYLLIN-KI contains free and soluble theophylline, which is so quickly absorbed that gastric irritation is rarely a problem.

Pediatric dosage: 0.2 ml. per pound of body weight on arising; at 3 P.M.; and on retiring. Adjust dosage to patient response.

CAUTION: Do not use other xanthine preparations concurrently. In some patients prolonged use of iodides can lead to hypothyroidism.

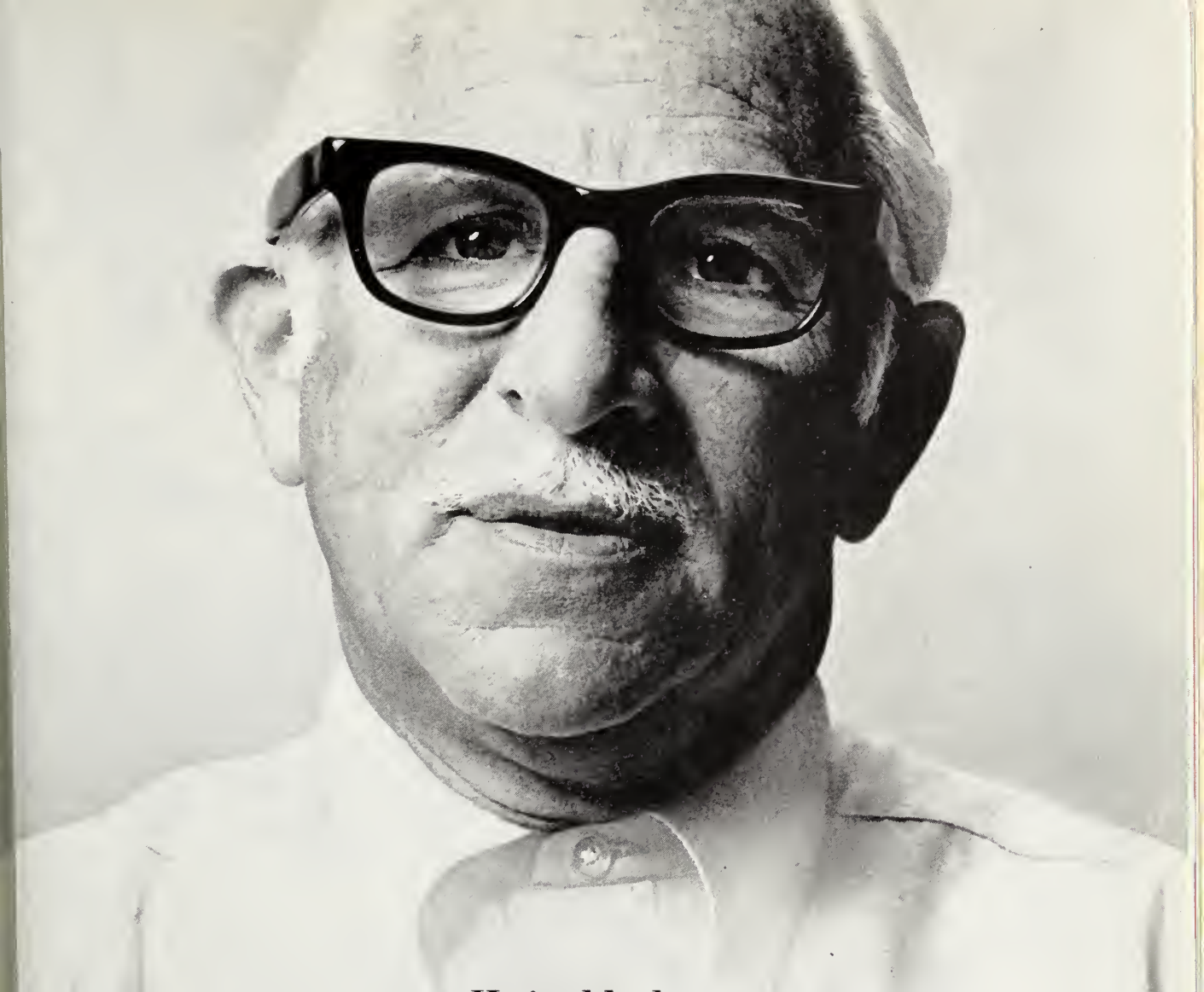
Contraindicated in patients with hyperthyroidism or known sensitivity to iodides. May be contraindicated in peptic ulcer.

Side effects include possible erythema, slight rhinitis, mild sore throat. If these symptoms develop, discontinue use.

ELIXOPHYLLIN®-KI

Each 15 ml. contains: theophylline (anhydrous) 80 mg., potassium iodide 130 mg., alcohol 10%

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Demethylchlortetracycline HCl 300 mg and Nystatin 500,000 units
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Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracycline should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken.

In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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Other advantages of ELIXOPHYLLIN: rapid and sustained bronchodilation • convenient, adjustable dosage • hypoallergenic • adrenergic abuse eliminated.

ELIXOPHYLLIN is theophylline in free and soluble form—resulting in rapid and dependable absorption with less risk of gastric irritation.

Adult maintenance dosage in bronchial asthma: one ounce (30 ml.) t.i.d. on arising, at 3 P.M., and on retiring. Adjust dosage to patient response. This average dosage provides continuous bronchodilation. Do not administer other xanthine preparations concurrently. May be contraindicated in peptic ulcer.

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(She took Persistin® instead of aspirin)



Persistin treats morning stiffness and pain the night before.

Persistin is a unique salicylate which combines the prompt analgesic action of aspirin to encourage early sleep with the proven, persistent action of salicylsalicylic acid to permit uninterrupted sleep. Three Persistin tablets at bedtime yield therapeutic serum salicylate levels on arising which are well within the range of effective salicylate therapy for the relief of pain and stiffness in arthritis.

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Persistin is also valuable for *day-long control* of the pain and discomfort of arthritis.

DOSAGE: *To relieve morning stiffness and pain:* when salicylates have not been taken during the day, an adult dose of three tablets at bedtime is suggested.

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PRECAUTION: Other salicylates should not be taken concurrently. Do not exceed recommended doses.

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salicylsalicylic acid 7½ gr. (485 mg.)—aspirin 2½ gr. (160 mg.)

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(chlordiazepoxide HCl)

Quickly relieves anxiety~Helps improve response in psychophysiologic disorders~Seldom impairs mental acuity or physical coordination, on proper dosage~Has wide margin of safety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 50. Libritabs™ (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100. With respect to clinical activity, capsules and tablets are indistinguishable.

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FALSE ANEURYSM AND ARTERIOVENOUS FISTULA

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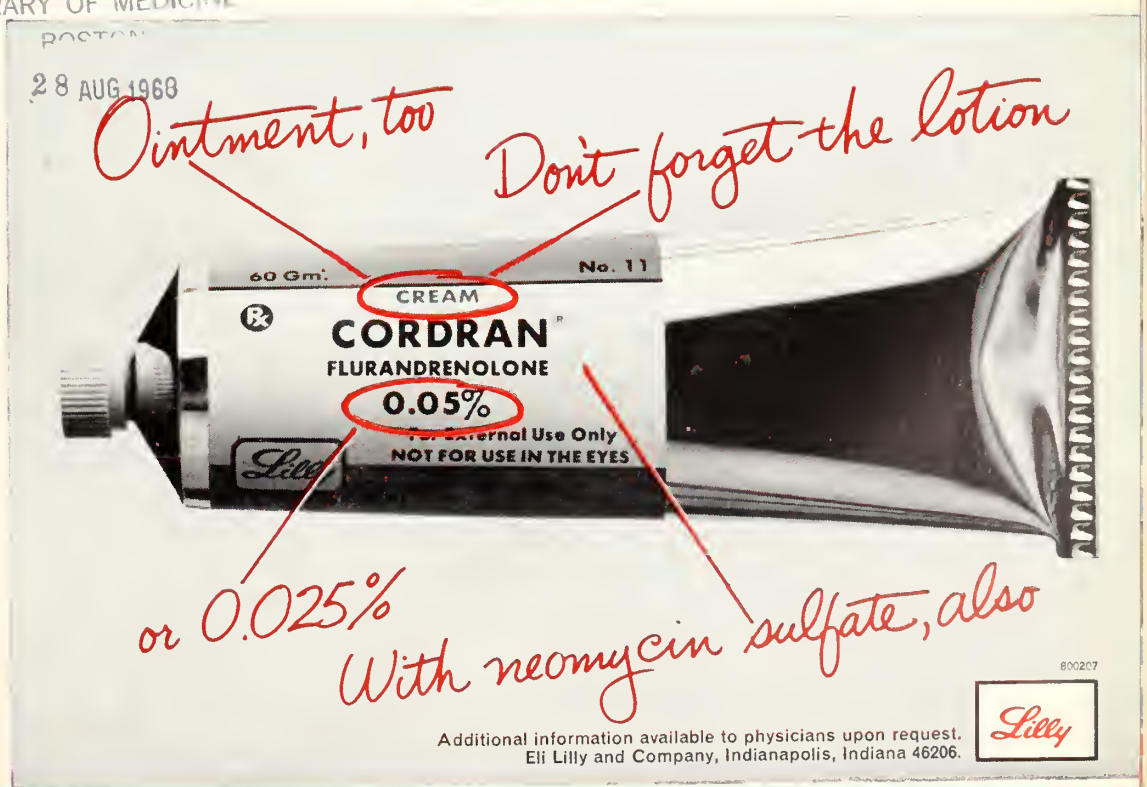
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LME 64 AUGUST, 1968 NUMBER 8

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The views expressed in this publication are those of the writers and do not necessarily reflect the opinions of the South Carolina Medical Association.

Contributions of Original Articles

Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

Illustrations—Ordinarily publication of 4 small illustrations or the equivalent accompanying an article will be paid for by The Journal. Any number beyond this must be paid for by the author except under unusual conditions. Illustrations should be sent as glossy prints or graphs in black ink with lettering large enough to show after reduction.

References—Should conform to the following order: surname and initials of author, title of article in small letters, name of periodical, with volume, page, month, day of the month if weekly, and year—e.g.: Lee, G. S.: The heart rhythm following therapy with digitalis, Arch Int Med 44:554, Dec. 1942. They should be listed numerically in order of appearance in the text. Standard abbreviation for journals should be used. Note that periods are not used with these abbreviations as indicated by the Index Medicus. Other abbreviations should also be standard— e.g. mg, ml, Gm.

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pinworms
n this
amily?

possibly, because hygienic measures alone, however meticulous, may not prevent the spread of pinworm infections

REMINDER: Because pinworm infections spread easily and quickly in families, schools, and institutions, multiple infections in primary groups seem to be the rule rather than the exception. For successful management, it is desirable to check all exposed members of the family or play group. The *single-dose efficacy* of POVAN makes group therapy entirely practical, convenient, and economical.

INDICATION: Pinworm infection.

PRECAUTIONS: Tablets should be swallowed whole to avoid staining teeth. Pyrvinium pamoate will stain most materials. Stools may be colored red.

ADVERSE REACTIONS: Nausea, vomiting, cramping, and diarrhea have been reported.

POVAN is available in suspension or tablet form. The pleasant-tasting, strawberry-flavored suspension contains the pamoate equivalent of 10 mg. of pyrvinium base per cc., in 2-oz. bottles. The sugar-coated tablets each contain the pamoate equivalent of 50 mg. of pyrvinium base, bottles of 25.

...and if hygienic measures alone are not enough...?

when examination reveals pinworm infection, estimated to occur in from ⅓ to more than ½ of all American children from every social level, an increasing number of physicians favor treatment with a single, economical dose of—

Povan®
(pyrvinium pamoate)

PARKE, DAVIS & COMPANY, DETROIT, MICHIGAN 48232

PARKE-DAVIS

33668



Vacation trip....

Motion sickness?

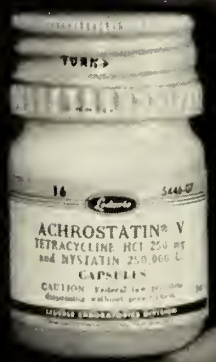


This time it'll be different. Emetrol taken before the trip begins will usually prevent nausea and vomiting. Emetrol is effective and safe...most helpful where safety is most important. It acts locally—not systemically.

ROERER WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate solution
emesis control

From the First Family of Tetracycline—
One of the 31 useful dosage forms in the ACHRO Family
ACHROSTATIN® V Capsules
Tetracycline HCl 250 mg /Nystatin 250,000 units



The lowest priced tetracycline-nystatin combination

Lederle

329-8/6094

MORNING STIFFNESS EASED LAST NIGHT

(She took Persistin® instead of aspirin)



Persistin treats morning stiffness and pain the night before.

Persistin is a unique salicylate which combines the prompt analgesic action of aspirin to encourage early sleep with the proven, persistent action of salicylsalicylic acid to permit uninterrupted sleep. Three Persistin tablets at bedtime yield therapeutic serum salicylate levels on arising which are well within the range of effective salicylate therapy for the relief of pain and stiffness in arthritis.

Thus, therapy with Persistin allows many arthritics to dress more quickly and easily, and face the morning optimistically.

Persistin is also valuable for *day-long control* of the pain and discomfort of arthritis.

DOSAGE: *To relieve morning stiffness and pain:* when salicylates have not been taken during the day, an adult dose of three tablets at bedtime is suggested.

For 24-hour control of pain: Adults up to 160 lbs., one tablet after each meal and one at bedtime. Adults over 160 lbs., one tablet after each meal and two at bedtime.

PRECAUTION: Other salicylates should not be taken concurrently. Do not exceed recommended doses.

PERSISTIN®
salicylsalicylic acid 7½ gr. (485 mg.)—aspirin 2½ gr. (160 mg.)

SHERMAN
LABORATORIES, INC.
Detroit, Michigan 48211



PROOF POSITIVE

Diet-Rite Cola...America's Number One low-calorie cola... no sugar at all...less than one calorie per bottle...the one with the wonderful taste of cola...pH approximately 2.6 to 2.8...same general range acidity as other cola beverages plus number of fruit juices.

You will like Diet-Rite Cola. So will your patients.

Royal Crown® Cola Co. Columbus, Georgia

"DIET-RITE" IS A TRADEMARK OF ROYAL CROWN COLA CO., REG. U.S. PAT. OFF. © 1967 ROYAL CROWN COLA CO.

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient sodium excretion is greatly enhanced. Yet potassium loss is lov

The therapeutic action is smooth, and persists for a full 24 hour With Enduron you can prescribe convenient once-a-day dosag without skimping your patients on day-long thiazide effectivenes

Of course, as with all thiazides, supplemental dietary potassiu should also be considered.

Use Enduron as a basic therapy in patients with mild to mo erate hypertension. A single 5-mg. tablet each day is ample most cases.

Once a day, every day

ENDURON

METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVE



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

)nce a day, every day
ENDURONYL®
ETHYCLOTHIAZIDE 5 mg. with
SERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



PARGYLINE

METHYCLOTHIAZIDE

Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether your patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings were reduced from 112 pre-treatment to 90 post-treatment; *sitting* from 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearly alike in all three body positions.

Use Eutron for managing your moderate to severe cases. Its building blocks enhance each other; hence lesser doses often suffice

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801C

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage; caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug.

804438R

ABBOTT

TM-TRADEMARK



When asthmatic bronchitis is complicated by an "epicurean taste"

Prescribe ELIXOPHYLLIN®-KI. Its pleasant fruit-flavored vehicle disguises the bitter taste of potassium iodide. Moreover, ELIXOPHYLLIN-KI won't make young patients jittery or keep them awake at night. Unlike most bronchodilators, ELIXOPHYLLIN-KI does not contain ephedrine-like drugs. Other advantages: rapid and sustained bronchodilation; convenient, adjustable dosage; less risk of gastric upset. ELIXOPHYLLIN-KI contains free and soluble theophylline which is so quickly absorbed that gastric irritation is rarely a problem.

Pediatric dosage: 0.2 ml. per pound of body weight on arising; at 3 P.M.; and on retiring. Adjust dosage to patient response.

CAUTION: Do not use other xanthine preparations concurrently. In some patients prolonged use of iodides can lead to hypothyroidism.

Contraindicated in patients with hyperthyroidism or known sensitivity to iodide. May be contraindicated in peptic ulcer.

Side effects include possible erythema, slight rhinitis, mild sore throat. If these symptoms develop, discontinue use.

ELIXOPHYLLIN®-K

Each 15 ml. contains: theophylline (anhydrous) 80 mg., potassium iodide 130 mg., alcohol 10%

SHERMAN
LABORATORIES, INC.
Detroit, Michigan 48211



■ to help restore and stabilize the intestinal flora

■ for fever blisters and canker sores of herpetic origin

LACTINEX contains both *Lactobacillus acidophilus* and *L. bulgaricus* in a standardized viable culture, with the naturally occurring metabolic products produced by these organisms.

First introduced to help restore the flora of the intestinal tract in infants and adults,[1, 2, 3, 4] LACTINEX has also been shown to be useful in the treatment of fever blisters and canker sores of herpetic origin.[5, 6, 7, 8]

No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

HYNSON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND 21201

(LX64)

LX
LX
LX



Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

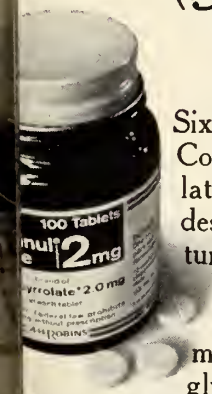
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming): Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

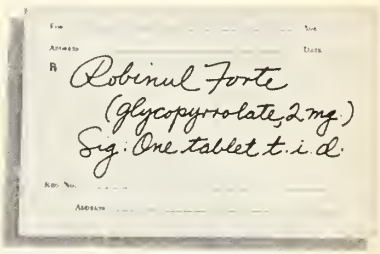
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) ...d good acceptance among numerous physicians, ... others just didn't seem to want to give it a try, ...ably because the anticholinergic they were al... using was giving acceptable results.

...ever, we believe you'll agree there's always ... for a better anticholinergic. This is why we're ...g you to give Robinul Forte a fair trial. Robinul ... exerts a highly specific antisecretory action and ...ed inhibitory effect on intestinal tone. We're con...d you'll agree that this is indeed an outstanding ... when you observe its outstanding suppression of ... symptoms. Furthermore, it is unique in that it ...es intestinal tone, yet has little or no effect on ...alsis. In addition, the incidence of the more ...rsome peripheral side effects is low.

...nger does the physician have to look for extreme ...outh as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.
Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions
or
Area Code 704 253-2761
Charles W. Neville, Jr., M.D.
Assistant Professor of Psychiatry and Medical Director



Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl.

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856



Just one tablet at bedtime • Prevents painful night leg cramps • Permits restful sleep

How many of your patients stamp their feet at night and lose sleep because of painful leg cramps? Unless prompted, they usually fail to report this distressing condition and suffer needlessly.

One tablet of QUINAMM at bedtime usually controls distressing night cramps and permits restful sleep with the initial dose.

Prescribing information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Side Effects/Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF MARION MERRELL, INC.
PHILADELPHIA, PENNSYLVANIA 19144

for the searing pain of "Shingles"...



PROTAMIDE®

(colloidal solution of denatured proteolytic enzyme)

Offers prompt pain relief

Relief of neuritic pain from *herpes zoster* (shingles) is prompt[1-3]—usually after the first few intramuscular[2] injections—particularly when therapy is administered early.[3,4] The duration of disability in many patients is often significantly shortened.[2] Postherpetic neuralgias—even in the elderly—rarely develop.[1,4] Complete pain relief is observed in most patients within 5 days.[2]

Administration in *herpes zoster:* one ampul (1.3 cc.) I.M. daily for 2 to 5 days. Caution: For intramuscular use only. Inadvertent I.V. administration may cause anaphylactoid reaction. Supplied: Boxes of 10 ampuls, 1.3 cc. each.

References:

1. Combes, F. C. and Canizares, O.: *New York State J. Med.* 52:706-708 (Mar. 15) 1952.
2. Xander, G. W.: *Western Med.* 1:14 (Sept.) 1960.
3. Baker, A. G.: *Penna. Med. J.* 63:697-698 (May) 1960.
4. Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R.: *Northwest Med.* 75:1249-1252 (Nov.) 1955.

SHERMAN
LABORATORIES, INC.
Detroit, Michigan 48211



What can be done for Susan Jane To stop the runs and crampy pain?

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa.

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent)..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified).... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls three times daily.

RORER

WILLIAM H. RORER, INC.
Fort Washington, Pa.

the antacid puzzle

In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

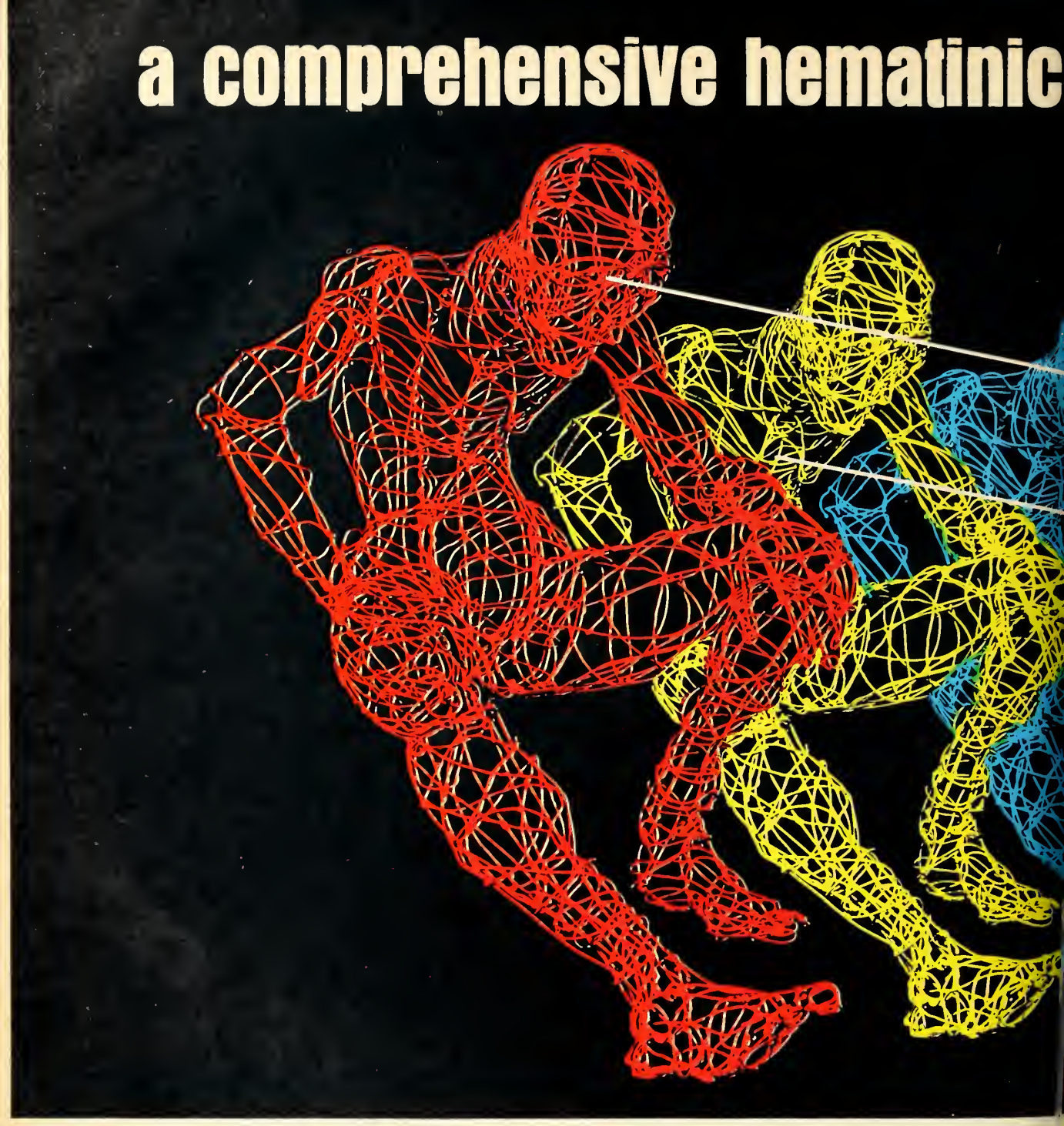
"will this one taste O.K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	1 mg.

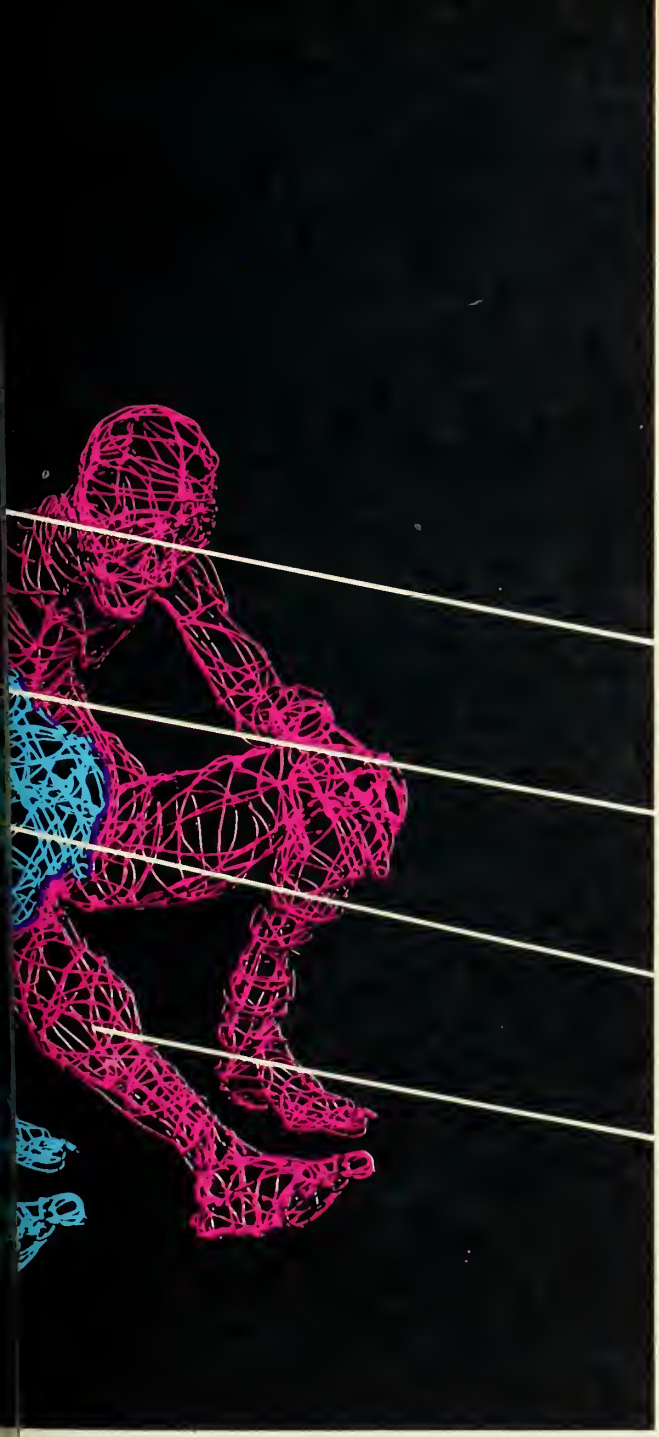
Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires approp investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without ade vitamin B_{12} therapy may result in hematologic remission bu rological progression. Adequate doses of vitamin B_{12} (paren or oral with potent intrinsic factor as in Trinsicon® [hem concentrate with intrinsic factor, Lilly]) usually prevent, ha improve the neurological changes.

As with all preparations containing intrinsic factor, resis may develop in some cases of pernicious anemia to the pot tion of absorption of physiological doses of vitamin B_{12}. If ance occurs, parenteral therapy, or oral therapy with so- massive doses of vitamin B_{12}, may be necessary. No single men fits all cases, and the status of the patient observ follow-up is the final criterion for adequacy of therapy. Pe



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

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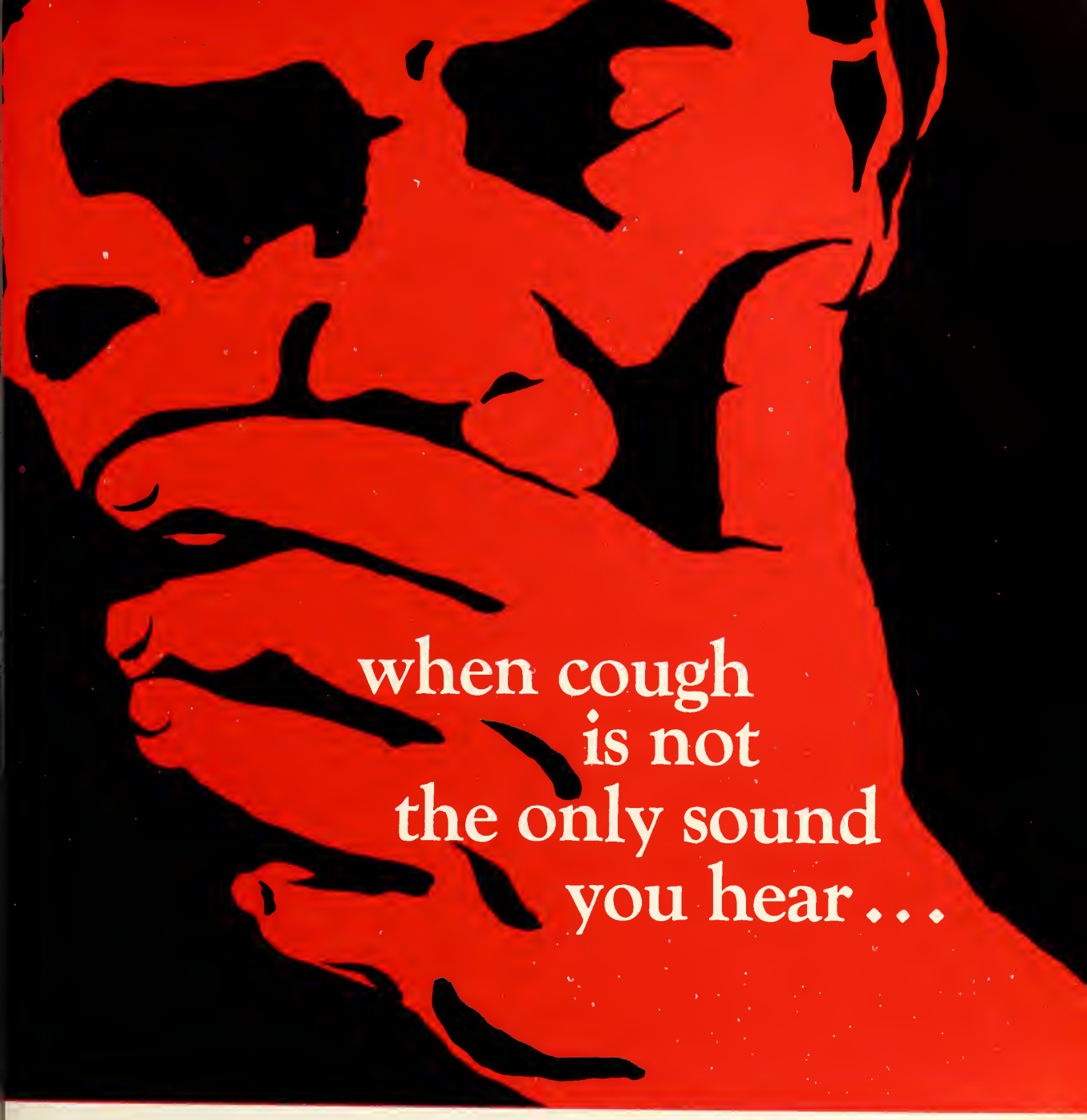
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DIENCEPHALIC SYNDROME *

TWO CASE REPORTS

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Thirty-three case reports of the diencephalic syndrome have been reviewed.[1-14] In these reports, the use of the brain scan and the beneficial results of treatment have not been emphasized. The purpose of this paper is to report two cases in which the brain scan was an important aid in the diagnosis and there was a remission of symptoms after irradiation therapy. The signs and symptoms of our cases are typical of those seen with the diencephalic syndrome.

Case Reports

Case I. R. P., a Caucasian infant, was born on October 25, 1965. The pregnancy and delivery were normal. Birth weight was 7 lbs. 3 oz. When the child was three months old, the mother noted that he vomited frequently and failed to gain weight. On March 23, 1966, the patient was admitted to a local hospital where exploratory laparotomy revealed the abdominal contents to be normal. Convalescence was uneventful except for his continued emaciation. On May 10, 1966, he was admitted to the Medical College Hospital.

Examination. Examination revealed the child to be emaciated and without subcutaneous fat. He was active and alert. The head circumference was 40.5 cm. Length was 45 cm, and weight was 10 lbs. 6 oz. The anterior fontanelle was flat. Bilateral rotatory nystagmus was present. The fundi were normal.

Laboratory. The hemoglobin was 11.3 grams, RBC 4 million, and WBC 4,058. Urine specific gravity was 1.014. Spinal fluid cell count was 0 and protein 220 mg. Skull films were normal. The electroencephalogram was abnormal but without focal abnormality. The brain scan had a large distinct area of increased uptake in the third ventricle area (Fig. 1). Pantopaque ventriculography revealed a filling defect in the third ventricle. Right brachial angiograms demonstrated the carotid siphon to be stretched and the anterior cerebral artery to be displaced laterally.

Operation. On May 23, 1966, Biopsy was done on a large suprasellar mass through a right frontal craniotomy. The pathology report was astrocytoma Grade II. The postoperative course was uneventful.

Course. Irradiation therapy of 3000 roentgens was given over a 20 day period. Following the irradiation therapy, the patient began taking his feedings well. On August 9, 1966, he was hospitalized with

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Fig. 1 Case 1. AP and lateral Hg^{197} brain scan demonstrating a heavy uptake in the suprasellar area.

a head injury sustained in an automobile accident. He had bilateral subdural hematomas which were removed unilaterally on August 19, 1966, and August 30, 1966. These procedures were tolerated well and he was discharged on September 10, 1966. He weighed 15½ lbs. on March 9, 1967. His weight gain was more than 50 per cent over the ten month period of follow up. The rotatory nystagmus and some emaciation remained. The child continued to do well at home until November 1967, when he again began to deteriorate. He expired January 18, 1968 from a perforated duodenal ulcer and recurrence of tumor.

Case II. A. S., a Negro female infant, was born on October 19, 1964. The pregnancy and delivery were normal. Birth weight was 6 lbs. She sat at 7 months, walked at 11 months, and talked as early as her siblings. Development was normal until one year of age. At one year of age failure to thrive was noted and she was admitted to a convalescent home. There the child did not gain weight and on May 23, 1966, she was admitted to the Medical College Hospital.

Examination. Examination showed the child to be emaciated, dehydrated, and without subcutaneous fat tissue. She was alert and active. The head circumference was 49 cm, height was 80 cm, weight was 16 lbs., and the blood pressure was 90/60 mm Hg. She identified simple objects and behaved appropriately. She had mild papilledema. The pupils reacted sluggishly to light. Her gait was widely based and unsteady.

Laboratory. The hemoglobin was 11.7 grams, RBC 3.7 million, and WBC 4,172. The skull films had separation of the suture lines and a "J" shaped sella that suggested increased intracranial pressure. The brain scan had increased uptake of radioactive material in the third ventricle area (Fig. 2). The electroencephalogram was abnormal with an exaggerated generalized slow wave pattern. A right brachial angiogram indicated hydrocephalus.

Operation. On June 6, 1966, the tumor biopsy was done and partially resected through a right frontal craniotomy. The tumor was a grade II astrocytoma.

Course. Postoperatively, irradiation was given with a total tumor dose at 6,000 r. The recovery was uneventful. When seen on June 20, 1966, she had a 19 per cent gain in weight (Fig. 3) and had grown 6

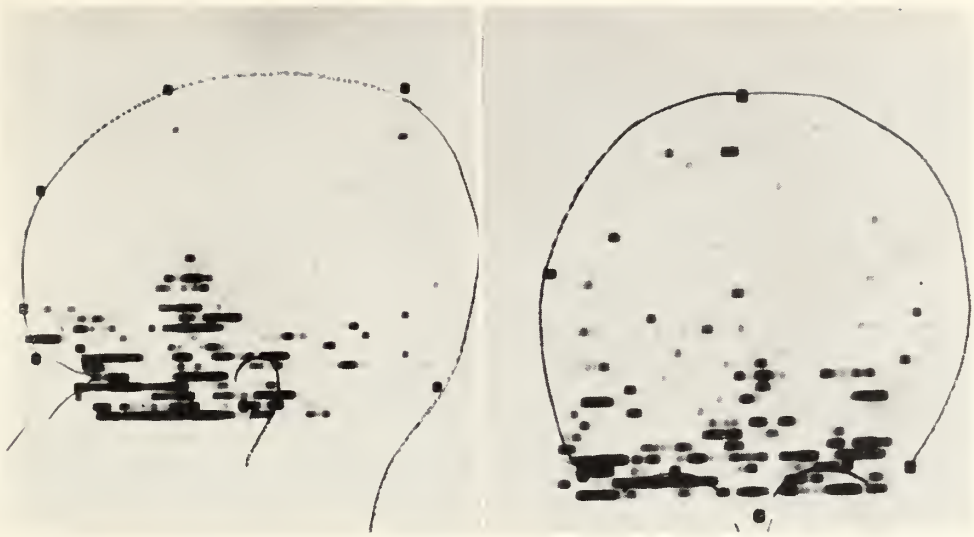


Fig. 2. Case 2. AP and lateral Hg^{197} brain scan. Although the uptake is less marked than in Case 1, it is diagnostic of a lesion in the suprasellar area.

cm in height. The child was still alive and doing well at the time of the last follow-up visit in January, 1968.

Comment

More than 33 cases of diencephalic syndrome have been reported.[1-14] The cardinal features are marasmus, euphoria, and sometimes nystagmus.[5] A few cases have increased intracranial pressure with hydrocephalus.[1,4,8,10,14] Delivery and pregnancy are normal. The age of onset varies from birth to three years of age.[2,8] Our



Fig. 3. Case 2. A. Preoperative photograph of patient. B. Postoperative photograph of patient which demonstrates weight gain 2½ months following operation and irradiation therapy.

second case is the only Negro patient reported with this lesion.

The earlier cases of diencephalic syndrome were diagnosed at autopsy. Later, ventriculography was used for diagnosis, particularly when hydrocephalus was present. The use of the brain scan has not been described in diagnosing this syndrome. Utilization of the brain scan with children probably has been avoided because of the possiblity of irradiation hazard. We have seen no untoward effects from brain scanning in children and would agree with Lorentz, *et al.*,[15] in regard to its safety. The brain scan was particularly helpful in Case I, which had no hydrocephalus. The clinical findings suggested the diagnosis and the brain scan confirmed it. Five of the cases reported previously received irradiation after the tumor studied by biopsy.[4,10,13,14] Three of these five cases survived at least nine months and had some improvement in their condition. Both of our cases received benefit from the irradiation therapy. Both patients gained weight and one is still alive at the time of this report.

Summary

Two additional cases of the diencephalic syndrome are presented. One of the cases is the first to have been reported in a Negro. The brain scan was positive in both cases and was particularly helpful in diagnosing one case. Both patients with the diencephalic syndrome improved as a result of irradiation therapy following tumor biopsy.

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FALSE ANEURYSM AND ARTERIOVENOUS FISTULA

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Three patients whom we have recently treated for false aneurysm and arteriovenous fistula have prompted us to review this subject. Although our cases were combat casualties, it is easy to understand why the incidence of these sequelae of arterial injury will rise irrespective of military conflicts. There are a great number of injuries from social violence and automotive accidents. Many reports of arterial injury associated with fractures and fixation devices have appeared. Vascular operations, arterial puncture, cardiac catheterization, extracorporeal circulation for heart surgery and dialysis, and arterial perfusion therapy with anticancer drugs are all procedures that will be utilized at an astoundingly increased rate. They carry the potential hazard of creating false aneurysms and arteriovenous fistulae.

Early recognition and correction is important. False aneurysms can bleed, become infected, and rupture. By progressive increase in size, they impinge on nerves and other vascular structures, creating pain, motor deficits, and ischemia. Arteriovenous fistulae cause distal ischemia and can grow to such proportions that cardiac failure ensues.

Case Reports:

The following case reports illustrate some of the problems involved in diagnosis and management:

Case I: H. W. B., a 20-year old white male, sustained multiple shrapnel wounds on April 25, 1967 while in combat in the Republic of Vietnam. The wounds involved the left foot, left ankle, right knee, right popliteal fossa, left forearm, and left side of the abdomen. Immediate laparotomy and debridement of all wounds of the extremity were carried out. No intraabdominal injury was found. He was transferred to the Medical Evacuation System and sent to the U. S. Naval Hospital, Charleston, on June 2, 1967, in a convalescent status. With the exception of multiple well-healed scars, physical examination was within normal limits. He was admitted to the Orthopedic Service for final treatment of the wounds of his extremities.

On July 24, 1967, three months after injury, a marked thrill was noted in the right popliteal fossa under a shrapnel wound scar. An arteriovenous fistula was demonstrated by arteriograms. (Figure 1). On August 28, 1967, a popliteal arteriovenous fistula was repaired. The fistula was divided and primary lateral repairs of the popliteal arteral and venous apertures were accomplished. The postoperative course was satisfactory.

Case II: W.T.H., a 19-year old white male, sustained injuries July 1, 1967 while in combat in the Republic of Vietnam. These consisted of a comminuted fracture of the third metacarpal bone of the right hand, a comminuted fracture of the proximal head of the fibula on the right, and severe soft tissue wounds from shrapnel. Immediate debridement and splinting were done. He was transferred to the

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Fig. 1. Femoral arteriogram demonstrating an arteriovenous fistula. A small piece of shrapnel is present.

Medical Evacuation System and admitted to the Orthopedic Service of the U. S. Naval Hospital, Charleston, on July 10, 1967. A course of reconstructive surgery was begun.

On August 13, 1967, five weeks after injury, the patient awakened during the night with a pain in the distal right thigh. The thigh was noted to be tense, tender, swollen and erythematous. Roentgenograms demonstrated several metallic fragments in the soft tissue of the thigh. There was a palpable pulsation in the thigh with a bruit and thrill present over the medial aspect. A small false aneurysm of the distal right femoral artery was demonstrated. It had ruptured, creating a larger false aneurysm.

At operation, on August 27, 1967, a false aneurysm of the right superficial femoral artery just above the knee was found. This had ruptured and created a larger space which was filled with clot. Shrapnel lying adjacent to the nearly transected artery was removed. The false aneurysm was resected and continuity of the artery established by an end to end anastomosis. The postoperative course was uneventful.

Case III: W.S.Y., a 20-year old white male, was admitted to the Orthopedic Service of the U. S. Naval Hospital on June 25, 1967, having sustained in Vietnam multiple penetrating shrapnel wounds of the forehead, right cheek, left eye and cheek, left arm, both legs, and a fracture of the left humerus. He had arthrotomies of the left knee and wrist, enucleation of the left eye, and multiple debridement procedures for open wounds.



Fig. 2. Femoral arteriogram demonstrating a small false aneurysm which has ruptured and caused a larger false aneurysm. A piece of shrapnel can be seen in relation to the small sac. Another is present in medial thigh.

A laceration of the left brachial vein had previously been repaired.

On August 22, 1967, two months after injury, a cast was removed from his left arm. At that time, swelling of the distal portion of the arm was noted and this was associated with a prominent thrill and bruit. A brachial arteriovenous fistula was demonstrated. (Figure 3). Repair of the fistula was delayed because of granulating wounds of the left arm. There was no evidence of heart strain or failure. At operation, October 30, 1967, an aneurysm of the brachial artery approximately 5 cm from the antecubital fossa was found and was in continuity with an arteriovenous fistula. The fistula was isolated and divided. Two lateral arteriotomies were closed primarily, one associated with the false aneurysm, and the other associated with the fistula. The communicating veins could not be repaired and were ligated. The postoperative course was uneventful.

Comment: Fortunately, diagnosis was made early in all of these patients and operative correction carried out promptly. There was no evidence of cardiac decompensation complicating the arteriovenous fistulae, and no infection was prevalent in any of the three wounds. Good distal pulses were maintained in all three. The one case demonstrated the coexistence of a false aneurysm and an arteriovenous fistula.

Discussion: The repair rate of vascular injuries during World War II was low and the amputation rate high.[7] There was a greatly improved rate of arterial repair and limb salvage during the Korean conflict.[11,18] Recently Chandler and Knapp[4] have made an encouraging report on vascular injuries during the Vietnam conflict. There have similarly been many reports referable to repair of vascular injuries in civilian practice. It is important to realize, however, that as the scope of cardiovascular surgery widens, complications of arterial injury will be encountered more frequently. Seidenberg and Hurwitt[16] reported five cases of false aneurysm resulting from retrograde femoral (Seldinger) aortography. Spratt, Doran and Baird[19] found that four of seven false aneurysms secondary to trauma in their series occurred following percutaneous or open femoral arterial cannulation.



Fig. 3. Brachial arteriogram demonstrates arteriovenous fistula. A false aneurysm sac was also present but is obscured by the humerus. Healed fracture of humerus apparent. Shrapnel present.

Reconstructive arterial surgery remains one of the predominant causative factors. Twenty-six of 33 false aneurysms reported by Spratt, Doran, and Baird[19] occurred secondary to arterial surgery. The majority were located in the groin, the single most common site being at the proximal anastomosis of the femoropopliteal bypass graft. Sawyers, Jacobs and Sutton[15] reviewed 20 peripheral anastomotic aneurysms developing after arterial reconstruction with prosthetic

grafts. Eight were associated with infection. Sumner and Strandness[22] presented three patients in whom false aneurysms developed two, four, and five years after femoro-popliteal Teflon bypass grafts. Stoney, Albo, and Wylie[21] reported that of a total of 135 anastomoses of synthetic grafts to the common femoral or popliteal arteries, 32 aneurysms occurred in 27 of 85 patients. The mean interval between original operation and disruption was 25 months. Probable causative factors were joint motion, end to side anastomoses, and infection.

There have been several reports of false aneurysm occurring after bone and joint operations. Dameron[6] presented a case of a false aneurysm arising from a branch of the profunda femoris artery which was caused by a protruding screw used with a Jewett nail to fix an intertrochanteric fracture. Meyer and Slager[13] reported a false aneurysm following a subtrochanteric osteotomy and insertion of a Blount bladeplate. One screw, projecting one-half inch perforated the second branch of the profunda femoris artery. Bassett and Houck[1] described a similar case in which the aneurysm did not become manifest until ten years after insertion of the offending screw used to secure a blade-plate. Creech, Gantt, and Wren[5] found an arteriovenous fistula between the superior gluteal artery and vein, caused by an intramedullary rod.

It is probable that the majority of false aneurysms and arteriovenous fistulae occur at the time of the original injury. Recognition can vary greatly, depending on the manifestations and the accessibility of the artery to examination. Development of false aneurysms will depend somewhat on the distensibility of the tissues surrounding the injured artery. A patient, previously included in a report by Bradham, Buxton and Stallworth,[3] was recognized as having an arteriovenous fistula immediately following injury. He was a 24-year old male admitted to the hospital seven hours after a bullet wound to the left thigh. A bruit was present and immediate operation corrected a fistula between the superficial femoral artery and vein. On the other hand, these complications may become manifest years later.[1]

Arterial damage can be present without the classical signs of distal ischemia. Progression in size of a hematoma, especially one that is pulsating, is strong evidence that there is an aperture in the wall of the artery from which blood is escaping. The presence of a bruit or thrill is further evidence that a false aneurysm or arteriovenous fistula has occurred. Late manifestations of an arteriovenous fistula are tachycardia, diminshed arterial flow distal to the communication, increased venous filling, and high output cardiac failure. Of 44 patients having an arteriovenous fistula reported by Pate and associates[14], 14 were in cardiac failure when admitted to the hospital. All of these 14 patients had a fistula of major vessels. Heart failure was more common with fistulas of the branches of the aortic arch than with distal branches. Cardiac damage in this group was not always reversible. The size of the fistula correlated well with the hemodynamic alteration.

Prevention is an important factor. To maintain an awareness of the many causes of false aneurysm and arteriovenous fistula will result in early recognition and treatment at a time when scar formation and infection are minimal and before severe sequellae such as cardiac failure occur. Smith, Szilagyi, and Pfeifer[17] reported a series of 33 patients with false aneurysms and arteriovenous fistulae. Early treatment was delayed in 19 (60%) because of an erroneous diagnosis. Any patient who has had arterial cannulation or puncture should be observed periodically for early signs of complications. Those having dialysis, perfusion therapy,

and cardiopulmonary bypass procedures warrant special surveillance. It is not unusual for a well executed and successful open heart operation to be complicated by difficulty at the arterial cannulation site.

The orthopedic surgeon must remain aware of the close proximity of certain vessels to bones so that fractures in these sites might remain suspect. There are numerous references to arterial injury associated with dislocations, fractures, and limb surgery.[2,8,9,10,12,20] Protruding screws, especially in such areas as the upper femur, are hazardous.

During arterial reconstructive operations, anastomoses at the groin should be avoided, and, if possible, grafts should not cross the groin region. The tension on grafts in this area will tend to disrupt suture lines. Those patients having arterial reconstructive procedures must be followed periodically for life, as false aneurysms may develop years after arterial repair, especially when artificial grafts are used. Every means available must be employed to protect these patients from infection. Arterial insufficiency distal to sites of blunt trauma cannot be passed off as arterial spasm as it usually indicates intimal disruption and partial or complete occlusion of the artery. Penetrating wounds of the neck, chest, and extremities showing evidence of more than minimal blood loss are best treated by early operation and inspection of the vessels in the immediate area. Widening of the mediastinum following penetrating or blunt trauma is indicative of aortic or major vessel damage.

No longer is there any basis for the premise that operation is best delayed until collateral circulation has developed. Restoration of normal flow through the natural pathway is the best means to correct distal ischemia. False aneurysms may give rise to infection, nerve and vascular compression, and may rupture, causing further damage to tissue or loss of life. Cardiac failure is a well known event in the natural history of an arteriovenous fistula.

The treatment of a false aneurysm includes the evacuation of the hematoma and restoration of arterial continuity without compromise of the lumen. This can be done by oversewing the defect, inserting a patch graft, resuturing a graft to the artery, or by replacing a segment of damaged artery with a new arterial substitute. Infection in false aneurysms taxes the ingenuity of the surgeon as the aneurysm must be obliterated and the area bypassed with a substitute through uninfected tissue planes. Arteriovenous fistulae are treated by excision and restoration of the artery by well accepted methods. The vein should also be repaired when it is feasible and surgery can be done with an anticipated low incidence of thrombosis.

Summary

It is anticipated that the incidence of false aneurysms and arteriovenous fistulae will rise because of increasing trauma from social violence and automotive accidents, the widening scope of cardiovascular surgery, and the growing field of orthopedic surgery. Early recognition and treatment offer the best protection to the patient, and will obviate ischemia, infection, nerve damage, and cardiac decompensation. Three illustrative cases are presented.

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Investigation of Deaths From Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Childbearing Age—W. H. W. Inman and M. P. Vessey Brit Med J 2:193-198 (April 27) 1968.

A study of thromboembolic deaths that occurred among women aged 20 to 44 was carried out by a team of medical field officers in England, Wales, and Northern Ireland. Of 309 patients who were not pregnant or puerperal retained for analysis, 53 were known users of oral contraceptives; 184 had conditions which could predispose to thromboembolism. Of those with no known predisposing conditions, 16 of 26 dying from pulmonary, 5 of 10 dying from cerebral, and 18 of 89 dying from coronary thromboembolism, were using oral contraceptives at the onset of their fatal illness. These results were compared with a control population collected from the practices in which a death had occurred; 17.1% controls were users. Deaths from pulmonary and cerebral thromboembolism were significantly more common among users. There was no overall difference in coronary deaths, but there was a significant excess of users among women aged 20 to 34 who had borne no more than three children. The risk of death from pulmonary and cerebral thromboembolism was increased seven to eight times among users and the mortality attributable to use was estimated to be 1.3 and 3.4 deaths per 100,000 users per year among women aged 20 to 34 and 35 to 44 respectively.

GALLBLADDER DISEASE IN CHILDREN

REPORT OF TWO CASES

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J. V. JEFFORDS, M.D.
Spartanburg, South Carolina

Primary gallbladder disease in children of pediatric age (birth to 13 years) is sufficiently uncommon to warrant a review of the literature and some consideration of the etiological factors and the problems encountered in making a diagnosis. Our interest was stimulated several months ago by a seven year old white boy who had acute, gangrenous cholecystitis with perforation. Since then we have had a 13 year old white girl with chronic cholecystitis and cholelithiasis. A review of the records at Spartanburg General Hospital yielded no other cases of primary gallbladder disease in this age group. Our own records show a 16 year old Negro girl with acute cholecystitis and cholelithiasis and a 17 year old white girl with cholecystitis, cholelithiasis and choledocholithiasis. We have eliminated from consideration all cases of congenital biliary tract disorders.

In review of the literature, a number of articles were found on the subject and it would seem that approximately 700 cases have been reported although some of these were in the age group of 13 through 17 years. The incidence of cholecystitis in children to that in adults is suggested to be 1 to 1.3 to every 1,000 adults. Potter[1] in 1928 stimulated interest in the problem and published a more extensive review of the literature on the subject in 1938. The most recent comprehensive report and review of the literature was published[2] in 1952. Since then there have been a number of case reports and a particularly good article by Glenn and Hill[3] in 1954 in which the etiological factors were discussed in some detail.

It has become evident to us, in view of the two cases which we are presenting from our own practice, that gallbladder disease in children must certainly be considered in diagnosis of chronic or recurrent upper abdominal pain and in acute abdominal situations.

Case Report

Case 1: This patient (J. R. W.) was a seven year old white male who was admitted to Spartanburg General Hospital on Oct. 25, 1965 with a history of acute abdominal pain with marked nausea and vomiting for the past three days. He had been given a laxative and three enemas by his mother during this time with no relief of his symptoms. When seen on the date of admission by his family physician, the child had generalized abdominal tenderness and muscle rigidity and appeared quite ill. He was referred for surgical consultation with the probable diagnosis of acute appendicitis with perforation.

His past history was essentially negative. He had been a well developed, normal child since birth, having had some of the usual childhood diseases but no serious illness or injury and no previous surgery. There was no history of allergies to food, drink or medication. His family history was negative.

Physical examination showed the patient to be acutely ill with shallow, rapid, grunting-type respiration. His temperature was 99.4° orally. The abdomen was flat and generally tender and rigid with marked tenderness in the right lower quadrant. No organs or masses were palpable and no peristaltic sounds were heard. Rectal examination revealed tenderness throughout on digital palpation, but no masses were felt. His laboratory work showed the white blood count to be 25,356 with 84 segmented, 5 bands, 7 lymphocytes, and 4 monocytes. The hemoglobin was 12.7 grams and his PCV 40 per cent. Catheterized urinalysis done after intravenous dextrose was started showed specific gravity of 1.025; sugar, three plus; reaction, 7; moderate amounts of acetone and diacetic acid; 4-6 WBC on microscopic examination.

Our initial impression was that he had acute appendicitis with perforation and generalized peri-

tonitis. He was given intravenous fluids and electrolytes and was started on antibiotic therapy with intramuscular chloramphenicol and scheduled for surgical exploration of the abdomen about three hours later.

Under general anesthesia the abdominal cavity was entered through a right lower abdominal transverse incision and there was found to be a considerable amount of dark, free peritoneal fluid which appeared to be bile stained. The appendix showed some evidence of inflammatory reaction with injection of the serosal vessels. There was also some edema of the appendix and surrounding bowel. However, it was soon determined that the appendix was not the offending organ, and it was then necessary to make another incision in the right upper quadrant of the abdomen where a mass was palpable. The mass proved to be the gallbladder which was considerably distended, and there were two areas on the fundus of the gallbladder which were gangrenous. On one of these areas there was a free perforation and bile was leaking from this out into the peritoneal cavity. There had been some attempts at walling off by the omentum and bowel, but this was not successful since the perforation was above the walled off area of the gallbladder. No stones were palpated in the gallbladder or in the common bile duct, and no congenital abnormalities were noted. There was considerable edema in the region of the common bile duct and cystic duct, and there were several large lymph nodes in this area. The liver appeared to be mildly enlarged also but otherwise appeared normal. No other abnormalities were noted. The gallbladder was removed in the usual manner by dissecting out the cystic duct and cystic vessels, clamping, cutting and ligating them, and removing the gallbladder from the liver bed. Suction was applied to the abdomen and soft rubber drains were left for drainage of the peritoneal cavity. The child tolerated the procedure quite well and returned to the recovery room in good condition.

Pathologic examination showed that there were no stones in the gallbladder. The microscopic sections of the gallbladder wall showed marked thickening of the layers due to edema and heavily mixed, predominantly acute, inflammatory infiltrate with areas of full thickness ischemic necrosis of the wall. There were also areas of well formed serosal granulation tissue. No specific granulomatous lesions, neoplastic elements or amoeba were demonstrated. The diagnosis was acute and subacute gangrenous cholecystitis with perforation.

The post-operative course was quite satisfactory. A naso-gastric tube with suction was maintained for three days. The abdomen remained soft and flat and the child was soon tolerating oral food and fluids quite well. His convalescence from that point on was essentially normal, and he was discharged from the hospital on the eleventh post-operative day. He has been followed since then and is doing quite well, having had no further difficulties.

Case Report

Case 2: This was a 13 year old white female (H. A. T.) who was admitted to Spartanburg General Hospital April 10, 1966 with a diagnosis of cholecystitis with cholelithiasis and scheduled for elective cholecystectomy.

Her history was that she had been having epigastric pain and right upper quadrant abdominal pain with some radiation through to her back. She also had nausea and vomiting and was unable to tolerate highly seasoned or greasy foods. She had no history of jaundice. She had been seen by her family physician after these sympotoms had been present for several weeks and he obtained cholecystograms which revealed the presence of gallstones. Cholecystectomy was advised.

Her past history was essentially normal. She had had the usual childhood diseases, no serious illnesses or injuries. Her family history was essentially negative.

Physical examination was negative except for slight right upper quadrant abdominal tenderness. Laboratory findings: her urinalysis was normal. WBC—7,681, 58 segmented, 42 lymphocytes. Hemoglobin, 13.5 grams. PCV, 38 per cent. Total serum bilirubin, 0.5.

At operation the gallbladder was found to be of moderate size. The wall was somewhat thickened and there were a few adhesions around the gallbladder. It contained a number of small stones, measuring 3 to 6 mm in diameter. The common duct appeared normal, was not dilated, and no stones were palpated in it. The liver appeared normal, and no other abnormalities were noted. The gallbladder was then removed in the usual manner after dissecting out, clamping, cutting and ligating the cystic vessels and cystic duct.

Pathology: Microscopic sections of the gallbladder wall revealed sheets of mucosal fibrous tissue and focal lymphocytic infiltrate. Diagnosis was chronic cholecystitis and cholelithiasis.

Her post-operative course was uneventful. She was discharged from the hospital on the seventh post-operative day and has been followed in the office since then with continued satisfactory convalescence.

Discussion

There are some apparent differences in gallbladder disease in children as contrasted with adults, in whom cholecystitis is commonly initiated by irritation from a

stone or by blockage of the cystic duct with a calculus, whereas, in children it is more apt to be associated with acute systemic disease or bacterial inflammation unaccompanied by stones. Cases have been reported in children as complications of typhoid fever and erysipelas and as due to the pneumococcus, colon bacillus, and the salmonella group of organisms. In our first case no stones were present, and there was a considerable inflammatory process in the gallbladder wall with edema and actually ischemic necrosis producing the gangrenous areas and the perforation of the gallbladder. The culture taken of the contents of the gallbladder showed no growth. Another difference which is noted in the literature is that jaundice associated with gall bladder disease in children is more often due to common duct and peri-ductal inflammation than to common duct obstruction by calculi. The incidence of common duct stones in children who have cholelithiasis is quite small, being reported by Ulin, et al[2] as only six per cent of 326 cases of primary gallbladder disease in children.

According to textbooks, the most common cause of cholelithiasis in children is related to excessive excretion of pigment associated with hemolytic anemia. However, this is not borne out by a review of the reported cases in the literature, and this was certainly not true of our second case or of two older youngsters, ages 16 and 17, from our personal practice who had cholelithiasis. Certainly one should always think of congenital hemolytic anemia or sickle-cell anemia in a child who has gallstones, but it is apparent that stones can be present without the presence of hemolytic crises and apparently develop from bile stasis, etc., as in adults.

An interesting fact to us in Case 1 was the apparent lack of toxicity from the bile peritonitis which was present. In adults with this much bile contamination of the abdominal cavity, the course has been quite stormy and quite frequently has terminated in death. In the review of the literature, no other free perforation from acute cholecystitis was noted. However, two cases were reported of newborn infants who had bile peritonitis, apparently secondary to inspissated bile obstruction of the common duct with jaundice and secondary rupture of the gall-bladder or bile ducts. In these cases, the acute fulminating picture of a bile peritonitis as seen in the adult was not observed. Those authors suggested that it probably should be called bile ascites rather than bile peritonitis. We were most pleasantly surprised at the essentially uneventful post-operative course enjoyed by our first case.

The treatment of gallbladder disease in children is quite similar to the treatment in adults. If cholelithiasis is proven, then cholecystectomy is the procedure of choice. In some of the reported cases where there was considerable edema in the region of the common bile duct and cystic duct, a cholecystostomy was done with removal of stones, and follow-up on these patients found them to have no recurrence of symptoms. Acute cholecystitis, since it is frequently of a bacterial or inflammatory origin, is treated at times with antibiotics and other supportive measures with subsidence of symptoms. However, as in adults, if there are persistent symptoms and findings with increasing temperature elevations and leukocytosis, cholecystectomy should be done. In most of these acute cases of cholecystitis the diagnosis was not made until surgical exploration of the abdomen, most frequently for suspected appendiceal disease, had been done. Then the procedure of choice is cholecystectomy, which is usually well tolerated by children.

Conclusions

1. Two cases have been presented; one which illustrates acute cholecystitis with secondary ischemic necrosis of the gallbladder wall with perforation and bile

peritonitis; and the other cholelithiasis with chronic cholecystitis with signs and symptoms very similar to that seen in adults.

2. A review of available literature on the subject of gallbladder disease in children has been presented briefly.

3. Certain differences in gallbladder disease in children as contrasted to that in adults have been mentioned.

4. Treatment has been discussed with regard to the difficulties in diagnosis and need for different approaches to therapy in some instances.

5. It is suggested, in both acute abdominal situations and in cases of chronic or recurrent upper abdominal pain in children, that gallbladder disease be considered in arriving at a diagnosis.

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1. Potter, A. H.: Biliary disease in young subjects, Surg Gynec Obstet 66:604 (1938).
2. Ulin, A. W., J. L. Nosal and W. L. Martin: Cholecystitis in childhood; associated obstructive jaundice, Surgery 31:312 (1952).
3. Glenn, F. and M. R. Hill, Jr.: Primary gallbladder disease in children, Ann Surg 139:302 (1954).

Some Clinical and EEG Findings in Patients With Migraine—K. H. Slatter Brain 91:85-98 (No. 1) 1968.

The nature of the EEG responses to photic stimulation reflects the constitutional predisposition to migraine and provides a characteristic and useful part of the total clinical picture. Although essentially a benign condition, migraine causes a disorder of cerebral function with accompanying EEG changes which may be permanent. Any abnormal EEG findings are the result of migraine itself and are not representative of a constitutional predisposition to it. When present they may indicate that cerebral damage is being caused. In addition to general factors, local cerebral lesions may also precipitate migrainous attacks in predisposed patients, and the lesion provokes focal migrainous disturbances in its area. The association between migraine and epilepsy is complex: the two conditions may occur independently in the same patient; migraine may precipitate an epileptic attack in a patient so predisposed; there may be a common focal structural lesion responsible for both conditions; and irreversible cerebral damage caused by migraine may rarely cause local epileptic changes.

X-RAY FILM OF THE MONTH

S. E. PUCKETTE, JR., M.D.
Medical College Hospital
Charleston, S. C.



This lateral film of the left great toe was taken on a 22 year old white female. Four months previously she had noticed a slowly growing protuberance beneath the medial tip of her left great toe. The nail became elevated and the area tender. The lesion ulcerated and began to drain and at this point the patient sought medical attention.

This is a subungual exostosis. This is a solitary benign tumor of bone occurring on the distal phalanx beneath the nail. This condition appears to have been first recognized by Dupuytren in 1817 and described by him in 1839. For a long time it was known as a "Dupuytren's exostosis."

There is fairly good evidence to indicate that this is a different type of lesion from the conventional osteo-cartilaginous exostosis (osteochondroma). The causative factors are not known, although multiple theories have been advanced.

The overwhelming majority of them are on the toes, almost invariably the great toe and tend to favor the more medial aspect. While occurring in all ages, the majority are seen in teenagers and young adults. The duration of symptoms is usually measured in months, and the tumors are more common in females. Obviously they can be confused with other subungual growths.

Treatment consists of surgical removal of the bony outgrowth. Excision must be radical to avoid recurrence.

REFERENCE
Evison, Gorgon. Subungual exostosis, Brit J Radiol 39:451 1966.



President's Page

In my report to the House of Delegates at the meeting of the South Carolina Medical Association in Myrtle Beach in May 1968 I called their attention to a publication by the Department of Health, Education and Welfare relative to a conference held in Washington in October 1967 for the purpose of promoting the group practice of medicine. Several people have suggested to me that I should give this report to the membership-at-large, and I am using the President's Page for this purpose.

On reading the publication it immediately becomes apparent, when you look at the list of those who participated, that this group of people (which included medical administrators, labor union economists, and other people in administrative positions in medicine) was picked to attend this conference because of their known affinity for government programs and the ultimate socialization of the medical profession. If the plans proposed in this publication are carried out they will, in my opinion, destroy our present method of delivering health services which have proven to be the finest the world has ever known under the free enterprise system. Further, it will probably destroy the fee-for-service system as we now know it. As you all know, the government with its farm programs has destroyed the small farmer, and no doubt the solo practice of medicine will go the same way unless doctors are willing to fight for their rights. I believe that the best way to fight for our rights is through involvement in politics in order that we may place prudent and conservative representatives in Washington who will block socialized ideas and preserve the free enterprise system. I, therefore, advise and urge all of you and your wives to immediately join AMPAC and SCALPEL in order that we may elect our friends throughout the nation to the halls of Congress.

The publication referred to above is Public Health Publication No. 1750, entitled "Promoting the Group Practice of Medicine". It may be ordered from the Supt. of Documents, Washington, D. C., for 30 cents.

Joel Wyman, M.D., President

THE CONVERSION

Sweet Christ, here is a sick little one again,
Feverish and thin, fetid, and fretful with pain,
And I had jealous-hoarded this one day
Zealous to spend it some slow pleasant way.
So I shall do by rote the things I know
Reserving self, and turn and hasty go—
Or so I first think knowing from the past
That I shall find myself once more caught fast
By child's great eyes, by timid trusting stare.
Then suddenly, I know I care—I care.

Robert E. Quinn, M.D.
Georgetown, S. C.
JAMA, 204:42

Editorials

Lesson of History

Our local newspaper prints a story with the headline "Survey Concludes Negroes Less Prone to Malaria". It quotes from a nine-month survey which concluded that a Negro's chances of contracting malaria were about two-thirds as great as a Caucasian's, due to some unexplained partial immunity. The subjects were soldiers who had served in Viet Nam.

The colonel in charge said the survey was the first of its kind and was in considerable depth. He concludes that the serious risk of the outbreak of malaria in the civilian community is very remote, a fact which we thought was pretty well established for some time. He offers the theory that the reason Negroes are less susceptible to malaria is that they possess a relative immunity as a result of generations of natural selection processes in Africa.

If the colonel could only have resurrected a few old Southern planters he might have obtained this same information and theory without going to all the trouble of an extensive study.

Does Driver Education Educate?

Education of the young driver in the ways of the road is a well established activity into which the federal government pours $140,000,000 of our money. A great number of high school students are given instruction, and it may be hoped that they are actually taught firmly how to minimize the risk of the highway. The tendency is increasing to encourage the requirement of compulsory participation in the courses.

The concept that the slaughter and mayhem of the road might be reduced by raising generations of competent drivers is an attractive one that has met widespread approval. Graduates of training courses have been given some preferential status by way of early and less expensive licensing. Insurance companies have been willing to concede reduced rates to these young people presumably indoctrinated in careful driving.

A number of quite vocal observers of this program have been raising interesting questions lately. They ask whether any proper study has shown that graduates of training courses are really superior and safer drivers, and receive no reassuring answer. They point out the probability that by the time the candidate is eligible for training he is already well fixed in his pattern of behavior. They declare with assurance that emotional factors are active in 80 to 90 per cent of accidents, factors which are too broad and involved to be affected by brief training courses. They question the quality of much of the training; perhaps, they say, it is no better than the usual homegrown variety.

Are we pouring too much hope and treasure into an expensive and time consuming program that doesn't pay off? A careful reevaluation of the whole effort would seem to be in order.

(The editor's secretary informs him that after completing a driving course, in one month she had nine accidents of which five could be attributed to her. Fortunately she has not maintained this tempo.—Editor.)

An Editorial from Above the Border

South Carolina Catches Up—Almost

Back in March, 1965 Dudley and Pool reported two cases of sparganosis in North Carolina patients, the first such event in our state. An editorial in the same issue took some perverse pleasure in our having defied the traditional position of the state, and bested South Carolina in the matter of this particular worm, no cases having been reported among our Southern neigh-

bors. Now, Cox has turned up a case of sparganosis in a lifelong resident of the coastal regions of that state—no "Golden Strand" puffery was attached to the description of the patient's residence. Similarly, our two patients came from the eastern part of the state.

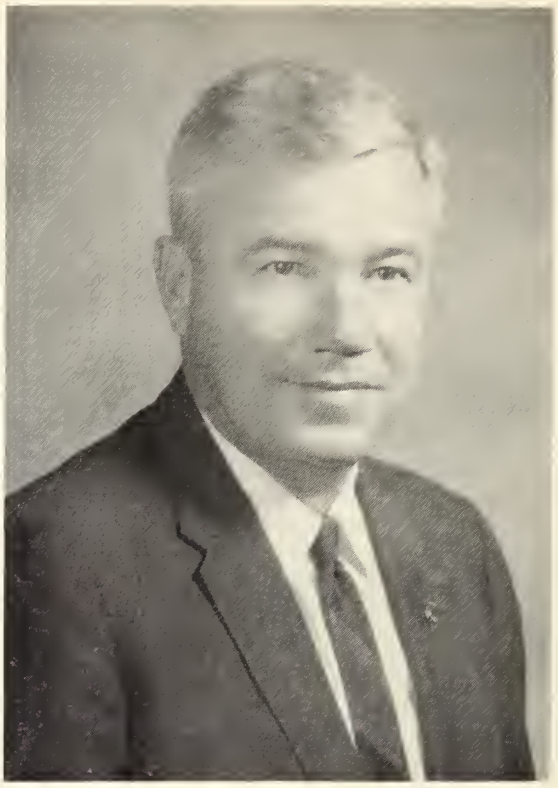
While South Carolinians can now feel somewhat relieved at having sparganosis verified in their state, we can take some pride in the fact that the author of the paper in question had a year of his training in the North Carolina laboratory which turned up our cases, and also, we still have a 100% edge on them in the number of reported cases. There is now no reason to shun North Carolina beaches for South Carolina beaches on the grounds of avoiding the dread Sparganum; in fact, there is no reason to shun North Carolina beaches.

North Carolina Med J

South Carolina Replies

From that erstwhile valley of humility comes word to this former mountain of conceit that our neighbor to the north of us still claims to be the sparganosis center of our area, despite the report of the presence of one of the lowly larvae in our own hitherto innocent state. While we must confess to being often the low man on the totem pole of accomplishment in a number of fields, we have no desire to achieve distinction as the home of the *Diphyllobothrium* and its progeny, and we have no intention of applying for a federal grant to allow us to seek, find, and record an astonishing number of victims. Let North Carolina keep its place in the wormy world, while we cavort on our beaches, "Golden Strand" and all, secure in the thought that there are enough human beings with their inevitable litter spread sea to sand dune to blot out any unwary sparganum on the loose.

The American Academy of Pediatrics will hold its Annual Meeting October 19-24 in the Palmer House Hotel in Chicago.



DR. C. TUCKER WESTON, JR.
VICE PRESIDENT

Dr. Tucker Weston, a native of Hopkins, S. C., was graduated from the Citadel and the Medical College of South Carolina (1943). He served internship at St. Francis Xavier in Charleston and at Columbia Hospital, with surgical residency at Columbia. Dr. Weston served in the medical corps for two years and began private practice, specializing in Orthopedic Surgery, in Columbia in 1947.

He has been surgeon for the Atlantic Coast Line RR since 1956 and surgeon for Southern RR since 1961; is a member of the staff of local hospitals, a member of the Columbia Medical Journal Club; S. C. Orthopedic Association; Columbia Medical Society executive board for several years; Civil Defense for Columbia Medical Society. He is president of Seaboard Coastline Surgeons and is chief of staff at the Baptist Hospital.

Dr. Weston has participated in a great many local charitable and political organizations. He has been director of

Sertoma International and president and chairman of the board. He is a life member and past president of the Association of Citadel Men and a member of the Board of Visitors of The Citadel. He has been active in the Republican Party.

Dr. Weston is a member of Trinity Episcopal Church and has served as Trustee of Episcopal Church Home. He is married to Pauline Hasell Hanckel and has four children.



D. STROTHER POPE, M.D.
SECRETARY

A native of Columbia, South Carolina, Dr. Pope received his B.S. at the University of South Carolina and his M.D. at the Medical College of South Carolina in 1935. He served his internship at the Baker Sanatorium in Charleston and at Garfield Memorial Hospital in Washington, D. C. After serving a residency in Obstetrics and Gynecology at Roper Hospital in Charleston, he served as resident in medicine at Garfield Memorial Hospital.

He has served as President of the Alumni Association of the Medical College of South Carolina, 1944, and served on The Board of Trustees of the Medical College of South Carolina from 1942-1944.

He is a fellow of the American College of Obstetrics and Gynecology and was President of the South Carolina Obstetrics and Gynecology Society in 1966.

Dr. Pope is President of the Columbia Medical Society of Richland County and is serving on the Richland County Board of Health. He is immediate Past Chief of Staff of the South Carolina Baptist Hospital in Columbia.

Dr. Pope has served several terms in the House of Delegates of the South Carolina Medical Association, the last term being 1961 through 1967.



DR. J. D. GILLAND
MEMBER OF COUNCIL

Dr. Gilland is a native of Florence, S. C. He was graduated from the University of South Carolina and the Medical College of South Carolina (1938). He received his internship and residency training at Morrisania City Hospital and Lenox Hill Hospital, N. Y.; St. Luke's Hospital, Richmond and James Walker Memorial Hospital in Wilmington.

Dr. Gilland has been in the private practice of general surgery in Charlotte and Kingstree. In 1948 he began practice in Conway.

Dr. Gilland is on the surgical staff of Conway Hospital. He is a member of the Southeastern Surgical Congress, Southern Medical Association, the American College of Surgeons and Seaboard Coastline Surgeon's Association.

REPORT OF THE EXECUTIVE SECRETARY

M. L. Meadors

Membership in the Association increased last year by 17 net. Sixty-six new members joined during the year, 4 former members were reinstated, and we lost 53 by death or otherwise. Of the total number, 1638, in good standing last year, 1470 were paying members, 14 were Junior members paying only the $3.00 subscription to the Journal, 137 were Honorary members exempt from payment of State dues, and 17 were Service members, also exempt from payment of State dues.

Thirteen hundred, sixty-six members were also paid members of the American Medical Association, 136 were active members of AMA but exempt from payment of AMA dues, and our 14 Junior members held Associate membership in AMA.

So far this year, a total of 1374 members have paid dues to the State Association and 1278 have paid AMA dues.

Contributions to the American Medical Association Education and Research Foundation have continued about as in previous years. The amount collected and remitted for this purpose last year was $4,445.00. By far the major portion, of course, was in items of $10.00 per member as requested on our bills as a voluntary part of the dues. Of the members who have paid dues in 1963, a total of 399 have contributed $4,010.00 to AMA-ERF.

We continued the billing and collection of dues to SCALPEL, these amounting last year to $4,650.00, representing 232½ memberships. So far this year, we have received SCALPEL dues already from 205 members. The finances of the Association are in good shape, thanks to the increase in dues which was voted year before last and became effective the first of January 1967. The details will be covered in the Treasurer's report. Our office, of course, works very closely with him and the clerical work of the Treasurer is done by our staff.

The Association's indebtedness was paid off in full by drawing on a portion of the reserves invested for the general fund, and last year, due to the increase in dues, we again operated in the black.

In accordance with the action of the House, earmarking $5.00 of the dues increase for the permanent home fund, this amount from each member's dues was set aside and resulted in the addition of $6,945.00 to the permanent home fund from this source.

The story from the legislative front this year is vastly different from that of last year. It will be recalled that at the conclusion of the legislative session in 1967, following defeat of the osteopathic bills at that time, a joint resolution was adopted by the House and Senate providing for a nine man committee to investigate the advisability of changes in the osteopathic law. Included in this committee were the President of the Medical College, President of the South Carolina Medical Association and President of the Osteopathic Association. The others were three Senators appointed by the President of the Senate and three House members appointed by the Speaker. This committee, utilizing an appropriation provided for the purpose, visited Philadelphia last November to inspect the osteopathic school and training facilities there. Dr. Johnson, President of the Osteopathic Association, is a graduate of Philadelphia, and it is the largest and claimed by some to be the best of the osteopathic schools. After some delay and an extension of the time originally provided for the committee's report, the latter was brought in. After frank discussion of the advantages and disadvantages of the Philadelphia set-up, the report concluded with the recommendation that no change be made in our osteopathic laws at this time. The appropriation provided was insufficient to permit the committee to make inspections of other osteopathic schools.

This report and recommendation effectively disposed of any effort to pass an osteopathic bill at this session. In all probability, the fight will be renewed next year.

There have been a few other bills in which we have been interested, but none of them have presented any particular problem.

A bill was introduced in the Senate early in the session to revise drastically the licensing law with respect to the practice of podiatry. It was referred to the Committee on Medical Affairs, and we immediately requested public hearing before action on the bill. That is the last we have heard from it, and it remains in Committee.

Acting upon the recommendation of the legislative committee, Council directed last year the introduction and sponsorship of a measure to provide further protection for the physician in connection with blood transfusions and the transplant of human organs. In a Florida case some time ago, a physician was held liable for the contracting by a patient of a disease alleged to have resulted from organisms in blood transfused, upon the theory, apparently, that the blood was a commodity and therefore that the situation was covered by the legal principle of implied warranty of merchantability shall not apseller. The bill, as introduced in the Senate by Dr. Owens, provided that this implied warranty of merchantability shall not apply to blood and other human organs and defines the transfer and transfusion of such substances as medical service. The bill received a favorable committee report and passed the Senate without difficulty. It encountered some slight opposition in committee in the House, but emerged with a majority favorable report and passed the House, also without difficulty. It has been ratified and has now become law in the form we proposed.

There was another bill which the Association initiated but which we did not pursue. This was designated to prohibit advertising by members of the healing arts, including by name the osteopaths, chiropractors, dentists and others, as well as physicians. Although no objection was heard from any of the other groups, the bill ran into immediate and violent opposition from the chiropractors. This was to have been expected, since it was no secret that the bill was aimed at this particular group. They were aided and abetted also by the news media, who profit from their advertising. One radio station wrote a letter to each Senator castigating the medical profession in severe terms. In view of the violence of the contest which was evidently in prospect, and the relative unimportance to the medical profession itself, it was decided not to make the fight this year. The bill remains in committee and we made no effort to have it reported.

The optometrists have been trying throughout the session to obtain passage of a bill designed primarily to prevent advertising by optometrists and the location within the state of chain-store type vending of glasses. The bill was studied by the ophthalmologists and was not considered objectionable. It was generally conceded that the main purposes which it expressed were desirable. We kept in touch with the progress of the bill and attended two public hearings, but without any attempt to oppose or favor the measure. After considerable delay, it appears now that it will become law before the session adjourns.

There have been several other measures which have been studied as they were introduced but nothing has developed which our officials considered detrimental to the profession's interest. Thus, it has been a far lighter session so far as our work is concerned than any we have experienced in several years. We would like to pay tribute to the invaluable advantage of the presence of Dr. Frank C. Owens in the Senate. He is an effective and highly respected member of that body. His courtly manner and gracious approach are only two of his fine qualities. Our very pleasant relations and mutual understanding over the years have made it a pleasure and

privilege to work with him. His presence in the Senate has tended to lighten the burden of our efforts considerably.

The general work of the administrative office has continued as in previous years but with the natural increase resulting from the larger membership as it grows from year to year. With the additional financing we have added to our office personnel and believe that our records and record-keeping have proceeded more smoothly than ever.

During the past year a change was made in the printing of the Journal of the Association. The journal had been printed for many years, ever since before our connection with the Association, by Provence-Jarrard Company of Greenville. They did a first class job, but we learned last year of the possibility of getting equally as good performance for less money. Finally, and of course with Dr. Waring's approval, the change was made and beginning with the November 1967 isue, the Journal is now being printed by the Progress Press of Fuquay-Varina, N. C. Prior to making the change, efforts were made to find another printer in South Carolina who would do a comparable job for less money, but we were unsuccessful. Since ours is the business office for the Journal, we are particularly glad to call to your attention the substantial increase in the profit from its publication. This is due in part to an improvement in the advertising income, and in part to the savings made by the change in printers.

The usual AMA and other meetings were attended during the year and liaison maintained with that and the other State organizations. We cooperated with Dr. Waring in the planning and holding of the County Society Officers Conference in February. The program was good and the attendance better than usual. We have undertaken to answer correspondence and inquiries from members and societies alike, accepted invitations to county society meetings when received, and given legal opinions when requested.

We have undertaken to keep as closely in touch as possible with Blue Shield, the State Board of Health and Department of Public Welfare through the liaison committee on Title XIX. Along with Dr. Eaddy, Dr. Aycock and Dr. Arthur Rivers, we attended a conference in January on Title XIX, in the effort once more to iron out points of difference in connection with the administration of the program. As undoubtedly you are aware, it remains in the hands of the Department of Public Welfare with certain phases to be administered by the Department of Public Health. Your President this year, along with Dr. Johnson last year and Dr. Price the year before, did all they could to have the program put into the hands of the Department of Health, but the decision was otherwise. The State Plan for Title XIX has been approved by Washington, and according to our latest information from Dr. Rivers, is to become effective on June 1st.

In conclusion, let me express my keen appreciation of the opportunity to have worked in the past year with Dr. Eaddy, your President, Dr. William Perry, Chairman of Council Dr. Howard Stokes, Dr. Ben Miller and the other officials of the Association. Our cordial, friendly relationship, their unfailing courtesy and consideration both to the Executive Secretary and our office personnel have made this our 24th year one of the most pleasant in our long association.

Respectfully submitted,
M. L. Meadors

SOUTH CAROLINA MEDICAL ASSOCIATION

120th ANNUAL SESSION

HOUSE OF DELEGATES

NORMAN O. EADDY, Presiding

ABBREVIATED MINUTES OF THE MEETING

May 13, 1968
Ocean Forest Hotel Myrtle Beach, S. C.

Dr. Eaddy: I will ask the Chairman of the Credentials Committee, Dr. Rush, for his report please.

Dr. Cyril B. Rush, Chairman of Credentials:

Mr. President, eighty-six (86) Members of the House of Delegates are present. This constitutes a quorum.

The Chair: At this time we will ask for the presentation of resolutions and recommendations.

Dr. R. S. Solomon, Committee on Alcoholism and Drug Addiction. There is a copy of this resolution before you on the table.

A Resolution

WHEREAS, Alcoholism is recognized as a separate disease entity by leading medical and health authorities; and

WHEREAS, The treatment of alcoholism can be properly and adequately performed in most general hospitals, and

WHEREAS, Early and proper diagnosis and treatment is more often necessary to proper management and recovery; and

WHEREAS, Acure alcoholism and withdrawal may be a medical emergency; and

WHEREAS, The disease, alcoholism and withdrawal may be a medical emergency; and

WHEREAS, The disease, alcoholism therefore, presents a problem deserving the attention and active participation of the medical profession generally; NOW THEREFORE

BE IT RESOLVED, That the House of Delegates of the South Carolina Medical Association, in meeting duly assembled this 13th day of May, 1968, does hereby recommend to hospital adminstrators, medical staff and governing boards of all registered hospitals in South Carolina:

1. That rules, regulations and by-laws of said hospitals be amended to allow admission and treatment of alcoholics.

2. That patients suffering from alcoholism be admitted for treatment and care at the request of their physician or service.

3. That the South Carolina Insurance Commission be urged to earnestly solicit the cooperation of all carriers of hospitalization, health and accident insurance in the State of South Carolina to include in coverage afforded by them treatment for acute and chronic alcoholism as a basic coverage.

4. That the physicians of the South Carolina Medical Association utilize, where applicable, the diagnosis of alcoholism in order that the patient may avail himself of insurance coverage as set forth in paragraph 3 above.

BE IT FURTHER RESOLVED, That this Resolution, when adopted, receive promulgation and implementation as the policy of the South Carolina Medical Association. (Thank you.)

COMMITTEE ON ALCOHOLIC AND DRUG ADDICTION
Robert S. Solomon, M.D.
Donald L. Duerch, M.D.
Joseph Marshall, M.D.
Harold Moody, M.D.
Hunter Rentz, M.D.

The Chair: Thank you, Dr. Solomon. We will refer that to the Committee on Public and Industrial Health.

Dr. William H. Hunter, Anderson Medical Society (Recognized)

SUBJECT: TO ENCOURAGE IMPLEMENTATION OF AMPAC AND SCALPEL.

WHEREAS, government at all levels is concerning itself with the provision of health services; and

WHEREAS, government activity and policies with respect to the provision of health services are determined by our elected representatives to the congress; and

WHEREAS, the increasing intrusion of government into the patient-doctor relationships is not in the best interest of the medical profession and of the patient; NOW THEREFORE BE IT

RESOLVED, that the House of Delegates, S. C. Medical Association go on record as endorsing the medical PAC organizations; AND BE IT FURTHER

RESOLVED, that the House of Delegates encourage the members of our organization and their wives to become members of SCALPEL and AMPAC to the end that our free enterprise system of medical practice may be preserved and that the traditional patient-doctor relationship and the high quality medical care which has characterized our system of medical practice may prevail.

Respectfully submitted,
Anderson County Delegation

The Chair: Dr. Hunter we will refer that to

the Reference Committee on Miscellaneous Business.

Dr. Ford McIver Charleston:

REGISTER FOR PATIENTS WITH DOWN'S SYNDROME (MONGOLISM)

WHEREAS, recent discoveries related to the metabolism of tryptophan in mongols gives some reason to hope that infants with this abnormality may be helped, and

WHEREAS, there is at present no organized program in South Carolina to register infants born with mongolism, and

WHEREAS, the South Carolina Retarded Children's Habilitation Center is attempting to establish a registry for patients with mongolism, and

WHEREAS, the Center has already obtained the approval for this program of The South Carolina Chapter of the American Academy of Pediatrics and of the State Health Officer, now therefore,

BE IT RESOLVED, that the South Carolina Medical Association approves the establishment of a Register of Patients with Down's Syndrome (mongolism) which shall be subject to approval by the State Health Officer and which shall function on a voluntary basis and urges the support of its membership for this effort.

The Chair: That will be referred to the Reference Committee on Public and Industrial Health.

Dr. Eddie Parker (Charleston—Recognized): The Charleston County Delegation would like to present four (4) resolutions. I shall present the first, Dr. J. C. Hawk the second, Dr. Ken Boniface the third and Dr. F. M. Ball the fourth.

(Dr. Parker,) "Direct Billing Under Medicaid"

WHEREAS, Federal Law and regulations permit direct billing of patients under Medicare and, if desired by each individual State, of patients not receiving direct welfare support under the expanding Medicaid program, and

WHEREAS, Medicaid regulations in South Carolina do not direct billing of patients but restrict payment to physicians to the assignment method, and

WHEREAS, as Medicare is expanded in South Carolina, an increasing number of citizens will thus, under the present regulation, become directly dependent on public funds for medical care which will alter their private patient status, and

WHEREAS, it is considered best for the physician-patient relationship that the patient be directly responsible in his contract with his physician, in accordance with the principles repeatedly reaffirmed by our State Association and the American Medical Association, and

WHEREAS, private patients subsidized under the Medicaid program should have all the privileges granted private patients under the Medicare program, now therefore

BE IT RESOLVED, that the South Carolina Medical Association recommends that Medicaid regulations in South Carolina be amended so that direct billing of private patients under the Medicaid program be permitted in accordance with Federal law, and

BE IT FURTHER RESOLVED, that the South Carolina Medical Association shall petition the South Carolina Assembly to effect this change in the Medicaid program in this State.

The Chair: Dr. Parker, we wil refer that to the Reference Committee on Legislation and Public Relations.

The Chair: Dr. J. C. Hawk

Dr. J. C. Hawk (Charleston)

RESOLUTION ON COSTS OF HOSPITALIZATION

WHEREAS, increases in the costs of hospitalization have been given wide publicity and are now the object of investigations by both the Executive and Legislative branches of the Federal Government, and

WHEREAS, the South Carolina Medical Association shares this concern, particularly about the sharp and unprecedented rise which has occurred during the recent years of increasing governmental financing and regulation, and

WHEREAS, there has been the clear implication that unless soaring costs are checked, additional control measures, either by legislation or by executive directive, will be considered necessary, and

WHEREAS, the President has called for measures to provide incentives for efficiency by a system of rewards and penalties, and

WHEREAS, hospitalization costs are concerned with both the per diem rates and utilization figures, and

WHEREAS, there must already exist a full reservoir of experience in such costs under complete Federal Governmental control in the records of the Veterans Administration Hospitals and other Federally operated hospitals, therefore

BE IT RESOLVED, that the House of Delegates of the South Carolina Medical Association in session May 14, 1968, does hereby request and urge the American Medical Association:

1) to cooperate with both branches of the Federal Government in the investigation of the true reasons for rising hospital costs, and

2) To undertake to collect figures which portray accurately the per diem costs in Veterans Administration and other Federally operated hospitals, reflecting not only current expenses but also appropriate charges for all levels of administration, and an adequate amount to cover orgininal construction and equipment costs and depreciation, and

3) Further, to collect utilization and hospital stay data from Veterans Administration and other Federally controlled hospitals in order to have accurate figures for the average hospitalization costs in these hospitals for specific categories of illnesses or types of surgical procedures, by age groups, and

4) To insist in testimony before Congressional

committees that such data be widely publicized and utilized as a yard stick for evaluating hospital costs in non-Federally controlled hospitals, and

BE IT FURTHER RESOLVED, that the South Carolina delegates to the American Medical Association be instructed to introduce a resolution of similar wording and intent at the Annual Meeting of the House of Delegates of the AMA in June, 1968.

The Chair: Dr. Hawk, we will refer that to the Reference Committee on Miscellaneous Business.

Dr. Kenneth Boniface (Recognized):

"RESOLUTION ON THE PRACTICE OF MEDICINE"

WHEREAS, the practice of medicine has long been an esteemed profession which has and now continues to give invaluable service to mankind as a free and dignified profession.

WHEREAS, as a free profession, the practice of medicine and its allied disciplines have made great discoveries which have prolonged life and eased human suffering, and now give hopes of even greater discoveries.

WHEREAS, Changes in the political, social, economic life of the nation present a challenge to the continued leadership, growth and progress of the medical profession, and

WHEREAS, a profession owes its esteem and its right to survive by the services it renders to its fellowman and to mankind, and

WHEREAS, there is a growing gap between the need for medical services and the availability of medical services, therefore

BE IT RESOLVED, that the South Carolina Medical Association establish a committee to study the needs of the State for medical care in the light of present knowledge of the prevention and cure of disease and of our expected future advances in medical knowledge,

And to initiate programs through which physicians as individuals and collectively through their associations can take an active leadership in providing Health Care for the community.

And to study the means by which the medical profession can provide the needed medical services within the framework of a free and honored profession.

The Chair: Thank you Dr. Boniface that will be referred to the Reference Committee on Miscellaneous Business.

Dr. F. M. Ball, Charleston (Recognized): Mr. President, I have two resolutions.

WHEREAS, a question has arisen as to whether the Blue Shield Corporation is now acting as a private business in the State of South Carolina, and

WHEREAS, if it is the opinion of the legal advisor of the State Association that this is, in fact, the case

BE IT RESOLVED, that the State of South Carolina Medical Association withdraw as rapidly as possible from the operation of the Blue Shield Corporation as long as this is accomplished without injury to the present policy holders or compromising their health coverage in any way.

The Chair: Thank you, this resolution will be referred to the Reference Committee on Insurance, Blue Cross-Blue Shield.

Dr. F. M. Ball (Continuing) The second resolution is one commending Senator Strom Thurmond, you do not have a copy of this.

"Commendation of Senator Strom Thurmond"

WHEREAS, Senator Strom Thurmond of South Carolina was reported to be the only man in the U. S. Senate to oppose and vote, loud and clear in a voice vote, against the confirmation of Wilbur J. Cohen as Secretary of the Department of Health, Education and Welfare, and

WHEREAS, Wilbur J. Cohen is believed to be the major proponent for the establishment of national socialized medicine in the United States, in spite of his frequent denials of such intention, and

WHEREAS, The South Carolina Medical Association has consistently opposed the establishment of socialized medicine in this country, now therefore

BE IT RESOLVED, That the South Carolina Medical Association commends Senator Strom Thurmond and expresses its appreciation for his vote against the confirmation of Wilbur J. Cohen as Secretary of Health, Education and Welfare and for his firm and courageous opposition through the years to the establisment of state medicine and national socialism in the United States of America, and

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to him by the Secretary of The South Carolina Medical Association.

The Chair: Doctor, we will refer that to the Reference Committee on Miscellaneous Business.

Dr. C. C. Wannamaker (Recognized): (Charleston County) I will read a resolution for Dr. I. Grier Linton.

BE IT RESOLVED

1. That the Coordination of Benefits Rider, recently sent to Blue Cross insureds, be rescinded.

The instruction is that this rider is to become a part of the Blue Cross coverage without offering any reduction in premiums or even with the insured's permission. This is a unilateral dictum and not an agreement.

BE IT RESOLVED

1. That the South Carolina Insurance Commission restrict the practice of "Coordination of Benefits," unless the insured, who has a reduction of benefits, is refunded a portion of his premium which he paid for family coverage that year.

2. That insurance carriers be prohibited from selling policies and collecting premiums on duplicating family insurance plans unless they will pay benefits in full, according to the schedule of bene-

fits set forth in the policies.

3. That the Hospital Sponsorship Agreement is an invasion of a patient's privacy and is not a part of the hospital administration's duties, which are to see that the hospital is paid for services. Coordination of Benefits is the business of the insurance companies in their relationship to the policy holders.

The Chair: Doctor, we will refer this to the Reference Committee on Insurance, Blue Cross-Blue Shield.

Dr. J. P. Booker, Oconee County (Recognized):

Mr. Chairman, I have two resolutions, these are from the Oconee Medical Society (County). (Re: Inspection of Hospitals) WHEREAS, the Oconee County Medical Society exists as an affiliate of the South Carolina Medical Association, and likewise is identical with the Medical Staff of Oconee Memorial Hospital and;

WHEREAS, the Oconee Memorial Hospital Medical Staff and hence the Oconee County Medical Society feels that the State Board of Health regulations appertaining to the licensure of hospitals are in some ways obsolete and;

WHEREAS, the Oconee County Medical Society particularly and strongly objects to the physical inspection of privileged information as recorded on the patient's medical record by lay personnel representing the licensure section of the State Board of Health and;

WHEREAS, the Oconee County Medical Society feels that certification or accreditation by the Joint Commission on Accreditation of Hospitals whose inspections are carried out by licensed doctors of medicine should stand in lieu of and suffice to answer and provide ample assurance that the standards set forth by the South Carolina Board of Health are being met;

NOW THEREFORE BE IT RESOLVED, that the South Carolina Medical Association hereby recommends that the State Board of Health amend hospital licensure regulations and/or interpretations thereof to stipulate that hospitals bearing a certificate of accreditation by the Joint Commission on Accreditation of Hospitals shall be construed to have met state regulations concerning medical records and the contents thereof, precluding the necessity for examination of the said records by lay employees of the State Board of Health, this being the premise of the Federal Government in relation to the "Medicare" program and;

BE IT FURTHER RESOLVED, that a physician employee of the State Board of Health examine medical records of non-accredited hospitals."

The Chair: Thank you, Dr. Booker. This will be referred to the Reference Committee on Public & Industrial Health.

(Dr. Booker—continuing Regarding Vocational Rehabilitation Examination)

I. BE IT RESOLVED, that the Committee recommends to the governing body of the South Carolina Medical Association that it adopt a resolution recommending to the South Carolina State Legislature and any other appropriate state agencies concerned, that "financial need", as determined by reasonable and current standards, be included as a criterion, along with physical disability, to entitle a recipient to assistance under the Vocational Rehabilitation Program as pertains to financial assistance to the handicapped.

II. BE IT RESOLVED, that this Committee recommend to the governing body of the South Carolina Medical Association that it adopt a resolution recommending to the South Carolina Legislature and other appropriate state agencies, a policy requiring that any applicant for assistance under the Vocational Rehabilitation Program be examined by a physician, preferably one specializing in the field of the applicant's disability, and further that such physician preferrably be one other than the family physician of the applicant and that the costs of such independent examination be borne by the appropriate agency handling Vocational Rehabilitation Programs.

III. BE IT RESOLVED, that surgical procedures authorized, sponsored and paid for by the Vocational Rehabilitation Program be performed in an accredited hospital with a surgical service approved and accredited by the joint commission on Accreditation of the American Medical Association and that such accreditation be the sole standard for the approval of the medical and surgical services to be performed under the Vocational Rehabilitation Program.

The Chair: Dr. Booker this is referred to the Reference Committee on Public & Industrial Health.

Dr. R. C. Slocum, Columbia Medical Society (Recognized):

This is a resolution, Mr. Chairman, from the Columbia Medical Society concerning "Water Pollution."

WHEREAS, the Legislature of the State of South Carolina has gone on record stating that water is one of our most valuable assets, and

WHEREAS, many communities pump raw sewage into our rivers and streams and many industries introduce noxious wastes into our waters, and this pollution results in the destruction of wild life and reduces the availability of our waters for community, industry and recreational uses;

NOW, THEREFORE BE IT RESOLVED, that the House of Delegates of the South Carolina Medical Association, realizing the necessity for the preservation of this valuable asset, request the South Carolina State Legislature to diligently study methods to reduce such pollution, to pass such laws as needed to control this pollution, and that the existing laws be vigorously enforced.

The Chair: Thank you, doctor, that resolution is

referred to the Reference Committee on Public & Industrial Health.

Dr. Tucker Weston, of Columbia (Recognized):

Our State Board of Health Laws were passed in 1894 setting up the South Carolina Medical Association as the State Board of Health of South Carolina with the South Carolina Medical Association electing seven (7) men to the executive committee of the State Board of Health once every seven years, all seven being elected at the same time. This law was amended in the 1920's and at present the Comptroller General is on the Board, and the Nurses Association, the Veterinary Association, the Dental Association and the Pharmaceutical Association each has one member on the executive committee.

This is a resolution from the Columbia Medical Society (reading) Proposed Changes-Code of Laws of South Carolina

Re: State Board of Health.

Section 3: That the said South Carolina Medical Association, with the State Officers above named, are hereby vested with all the rights and charged with all the duties pertaining to organizations of like character, and said Board of Health so constituted and established shall be the sole advisor of the State on all questions involving the protection of the public health within its limits, and it shall be the duty of the said Board to make an annual report to the Legislature on all matters relating to its action.

Section 4: "That the said Association, shall elect nine members with one member being from each medical district, to be recommended to the Governor, who shall appoint them to cooperate with the State officers above named, to constitute an Executive Committee, having power to act in intervals of the meeting of the State Board of Health. Each member shall be elected for a term of three years, and these terms will be staggered so that each year three members will be elected. Three members will be elected at each annual meeting of the House of Delegates of the South Carolina Medical Association. Further providing that no member shall serve for more than three consecutive terms. In the event of a vacancy between the annual meeting of the South Carolina House of Delegates, Council of the South Carolina Medical Association shall recommend to the Governor on the recommendation of the councilor in the district where the vacancy occurs. Furthermore, providing that when vacancies occur among the members representing the State Nurses, the state Dental and State Pharmaceutical and State Veterinary Association replacements shall be recommended by the governing council of their organizations.

Further providing that upon the implementation of this act that no member of the executive committee be elected for a term of less than three years, i.e. 3 members for 3 years, 3 members for 4 years, and 3 members for 5 years.

The Chair: Dr. Weston, that will be referred to the Reference Committee on Legislation and Public Relations, thank you.

Dr. Tucker Weston: I have this other one. This is a Resolution to Amend Constitution. It has laid on the table one year to be taken up this year.

The following Amendment to the Constitution of the South Carolina Medical Association was proposed at the last annual meeting, laid on the table, and is to be voted on at this meeting.

"Resolved that the Constitution and By-Laws be amended so that only the five most immediate past presidents be members of the House of Delegates with the privilege of voting. Any past president may have the privilege of the floor of the House of Delegates.

The Chair: Dr. Weston, that will be referred to the Reference Committee on Constitution & By-Laws.

Dr. J. D. Gilland of Conway (Recognized):

Mr. President, the Horry County Delegation respectfully submits the following resolution on "Representation on Hospital Governing Boards"

Whereas, doctors as citizens, should take an active interest in community affairs and

Whereas, hospitals need active support and advice of the members of the medical community and only by having physicians active on governing boards can proper liaison between administrators and staff be maintained and

Whereas, Doctors of Medicine possess knowledge that can be valuable to hospital administration; therefore be it

RESOLVED, that the House of Delegates recommend to each county medical society that it actively and aggressively promote membership by members of their respective societies on governing boards of the hospitals within their area, and be it further

RESOLVED, that the House of Delegates recommend to the Governor of South Carolina that members of the South Carolina Medical Association be represented on the advisory boards of state hospitals, and that copies of this resolution be forwarded to the Governor of the State of South Carolina, the South Carolina Senate and the House of Representatives.

The Chair: Dr. Gilland we will refer that to the Reference Committee on Miscellaneous Business.

Dr. William T. Hendrix, Spartanburg (Recognized):

Several of our local MD's checked by the Internal Revenue Service. I am on a committee of the United Fund and our committee met with the head of the office and our representative was told the same thing that the Internal Revenue Service now interprets the use of a physician's car and its depreciation in this manner—that the hospital is now an extension of your office and any trips you make

to the hospital, whether it is three at night or four at night or six during the day—that is commuting and can not be deducted. In other words one physician was checked for '65 and was allowed 80% deducation on the costs and use of his car and was checked this year, for '66 and was told it now appears that the only house calls you make amount to 30% of the use of your car—so you can depreciate, on the cost and running of your car 30%, all these trips to the hospital are commuting. So, the Spartanburg Delegation submits the following resolution.

From: Spartanburg Delegation

Subject: Automobile deductions—Internal Revenue Service.

"Whereas, the Internal Revenue Service is classifying all the use of a physician's car as 'commuting' and

Whereas, there are still a large number of doctors in South Carolina who make house calls, and

Whereas, there are some doctors in the state who must travel fifteen to thirty miles to and from a hospital sometimes once and twice or more a day, and

Whereas, this change places an unfair hardship on physicians; now, therefore be it

Resolved that the State Medical Association at the state level try to persuade the state director of the I.R.S. of this inequity, and be it further

Resolved that the delegates to the A.M.A. urge the A.M.A. to attempt to change this unjust regulation at the national level.

The Chair: Dr. Hendrix, we will refer this resolution to the Reference Committee on Miscellaneous Business.

Dr. Wm. Weston, Jr. (Columbia)—Recognized:

Mr. President, this is titled "The Marchers"

This is a personal resolution shown to every member of the Columbia Delegation.

Whereas, the so-called group of marchers, locally and nationally, create disturbances,

Whereas, these Marchers produce emotional upsets—invite widespread unlawful acts,

Whereas, these acts lead to breaking laws and interference with the normal duties of the police and fire departments,

Whereas, fights occur, arson by setting fire and destruction of buildings, both commercial and private residences, thus inviting looting,

Whereas, these acts cause accidents and threats to our citizenry and damage to the community health,

Therefore be it resolved that we plead with the House of Representatives of the United States and the Senate of the United States to cause a halt and stoppage to these marches for a two-year period.

Further, that a copy of this resolution be sent to the South Carolina Representatives and the Senators and to the President of the United States.

Signed—William Weston, Jr.

The Chair: Dr. Weston, We will refer that to the Reference Committee on Miscellaneous Business.

Dr. W. T. Hendrix of Spartanburg Delegation (Recognized):

Mr. President, I have another resolution from the Spartanburg Delegation.

(N. B. This resolution on The National Safety Act was offered after the Special Order of Business—but was placed here in the record, to keep all resolutions together.)

(Dr. Hendrix reading)

Whereas, the National Safety Act requires First Aid training set up by each state,

Be It Resolved that,

(1) The South Carolina Medical Association endorse recommendations of AMA Conference on Emergency Medical Services (Chicago, Apr. '67) Re: National Highway Safety Act of 1966 (No. 4.4.11) in the "First Aid & Rescue."

(2) The South Carolina Medical Association recommend to the South Carolina Legislature that First Aid & Rescue Standards read for 'Advanced Red Cross First Aid Training or The Equivalent,' where any or part of this expression exists.

The Chair: Dr. Hendrix, that will be referred to The Reference Committee on Legislation and Public Relations.

The Chair: Dr. Waring and Dr. Owens, will you please do us the honor of escorting the members of the Woman's Auxiliary Officer's Corps in please? (Mrs. William J. Strohecker of Columbia, President, and Mrs. Peter C. Gazes, of Charleston, President-Elect, are escorted to the rostrum amid applause, the Convention standing.)

We come to the part of the program, Gentlemen, where we have improvement in the scenery. Mrs. Strohecker, who is the President of the Woman's Auxiliary, and Mrs. Gazes who is the President-Elect.

Mrs. Strohecker: Good morning. On behalf of the woman's Auxiliary to the South Carolina Medical Association let me tell you that we have had a most excellent year. We are real pleased with the progress that our ladies have made and I am sure that you will be, too. We gave our complete



Delegates Receive Auxiliary Officers

report yesterday to the Council and we would be delighted to have any of you pick up our program bulletin and read what your wives have been busy doing all year long. We are most appreciative of your financial support, your loyalty and devotion and we thank each one of you.

Mrs. Peter C. Gazes, Pres.-Elect: Mr. Chairman and members, I come before you today to extend the services of the Woman's Auxiliary. We wish to continue to promote health education with particular emphasis on our teenagers for we believe that the medicine of tomorrow is prevention. Health, Careers, Legislation, Safety, Disaster Preparedness, Community Service and support for AMA-ERF will continue to be our major projects. Guide us and support us, lend us your encouragement, call on us and please do not underestimate the value of one thousand-plus women. We pledge to you our enthusiasm, our loyalty and our devotion. Thank you.

The Chair: Don't you wish they were permanent members of the House of Delegates?

The Chair: At this time we come to the reports of officers. Is the Vice-President here? (Dr. Harrison Peeples comes to the rostrum) I will ask the Vice-President to preside while the President presents his address.

Dr. Harrison L. Peeples—Presiding.

Dr. Norman O. Eaddy's Presidential Address appeared in the July number of the Journal.

Dr. Peeples (Presiding) May I, in your behalf, commend Dr. Eaddy on his very informative address and express for you our appreciation for the fine work that he has done for us. He has devoted a great amount of time to his work and has served us well, indeed.

There are other reports from offficers and Dr. Eaddy will now preside.

Dr. Eaddy (Resumes the Chair):

Gentlemen, at this time we have a Special Order of Business, the meeting of the Corporation of the Blue Shield, which is the House of Delegates. If Dr. J. Hal Jameson will come forward, he is the President of The South Carolina Medical Care Plan.

THE ANNUAL MEETING OF THE CORPORATION, THE SOUTH CAROLINA MEDICAL CARE PLAN

(SPECIAL ORDER) 11:00 A.M. May 13, 1968

Dr. J. Hal Jameson, President—Presiding.

Dr. Jameson

Report to the Corporate Body of the South Carolina Medical Association

Medicine pioneered the concept of medical-surgical prepayment by establishing Blue Shield in 1939. In those early days the distinctive feature of the Plan was the acceptance of responsibility for the Plan's stability and success by the medical community. Without this stabilizing force, the early Plans might easily have failed.

In light of the fact that health care financing has become increasingly complex, this stabilizing force provided by the medical community is needed today more than ever.

That, plus the fact that the federal government is getting increasingly involved in health care and the public is demanding more and better health benefits makes it abundantly clear that organized medicine needs Blue Shield and Blue Shield need organized medicine as never before.

There may be occasional differences between organized medicine and Blue Shield but the cooperative efforts put forth by both dring the past year demonstrate their relationship is, and will remain, firm and steadfast.

Enrollment

Now, a look at enrollment.

With talk of rising medical costs a common topic of conversation by everyone today I'm sure it will be of interest to all of you to know that Blue Shield of South Carolina experienced a growth for 1967 of better than 10 percent, well above the 4.29 percent average national growth and the 1.29 percent for the District.

A significant portion of this growth can be accounted for as a result of our upgrading the $250 fee schedule on October 1, 1967, to $325 and increasing the medical care provisions to a $5, first day basis. These changes applied to all $250 contracts with the exception of a few special accounts and represent more attractive coverage to the potential enrollee.

By way of comparison, in 1963 only 29 percent of our subscribers were covered under the $325 contract. At the end of 1967, this had increased to 65 percent and by April 15 of this year 76 percent of our 334,000 subscribers were under the $325 contract with only 3 percent remaining with the $250 contract.

This means that with these higher benefits the subscriber is receiving better protection and, more of the doctor's bill is being paid.

Earned income from dues from all contracts for 1967 totaled $5,026,860 as compared to $4,729,506 for 1966.

Claims paid in 1967 amounted to $4,034,480 as compared to $3,864,290 in 1966.. This shows a $170,190 increase in the amount of claims paid over the previous year.

Operating expenses for 1967 totaled $734,173, compared to the 1966 total of $642,735. .The cost of operations per contract on an annual basis averaged $5.73. Compare this to the $5.63 average cost for 1966 and the efficiency of our operation is obvious, in light of the inflationary trend today.

These figures provide a monetary reflection of a definite growth pattern and Blue Shield representatives, backed up by appropriate advertising, have demonstrated in the past year the aggressiveness necessary to surpass the average national growth pattern.

Blue Shield gained 13,158 contracts in 1967. The year end report showed 120,839 contracts and 322,696 members accounting for the overall growth of more than 10 percent.

Enrollment also reached all-time highs in two other categories:

The number of Dread Disease contracts increased by 1,942, making a total of 34,858 at the end of the year.

Prolonged illness contracts were up 2,934 for a year-end total of 22,648.

A comparable net gain is forecast for 1968 and through our planning and marketing system there are more than 2,000 prospects who will be contacted during the year.

Internal Operations

Internally, Blue Shield operations have undergone a complete study designed to identify and analyze immediate and long-range requirements to improve service and operating efficiency for all Blue Shield subscribers on a nationwide basis.

The Stanford Research Institute of California, in conjunction with the National Association of Blue Shield Plans, completed the four-week survey on February 16 of this year. Ours was one of 12 Blue Shield Plans cooperating in the survey.

Some recommendations were made as a result of the survey and in those areas found to need improvement revisions have or are in the process of being made.

I might add that in no areas did the Research Committee find any serious fault with any of our systems or procedures and their recommendations were related more to minor changes in work flow and in combining work functions.

Ralph Schriber, Senior Systems Analyst for the Institute, said, "We were very impressed with the job the South Carolina Blue Shield Plan is doing. Our study shows it has made long-term plans and its results are clearly evident. Its methods of providing service to subscribers and its claims processing cycle are quite streamlined.

"The internal procedures and computer systems approach applied by it are some of the more advanced we have reviewed. As a result, the information gathered here has provided very valuable input to our study and will be most beneficial to other Blue Shield Plans throughout the United States."

We increased our computer efficiency during the year by replacing our two IBM's with one new Honeywell and at the same time realized an approximate 40 percent savings in computer rental charge.

However, despite the fact that South Carolina Blue Shield has one of the more sophisticated automated systems within the Blue Cross-Blue Shield movement, it has been decided that we will not be able to maintain this status without a major systems redesign.

This comprehensive undertaking has already been initiated and a tentative deadline of January 1, 1969, has been set for completion. Under the new system the subscriber's Social Security number will be his identification number. This will involve redoing the master system, all programs, all procedural manuals, training all employees in the new system and implementing it.

The one problem faced thus far is not in redesigning the systems but in finding qualified programmers to fill the jobs.

Professional Relations

Since May of 1967, the Professional Relations Department has increased its personnel in order to maintain a smooth flow of communication between Blue Shield and the medical profession.

Informational and instructional material has been disseminated to physicians by the newsletter—"What's Going on at Blue Cross-Blue Shield"—as well as through individual communications.

Workshops for medical assistants have been held throughout the state and participation and attendance has been excellent. The last series of workshops, held in cooperation with the South Carolina Medical Association and the South Carolina Hospital Association proved most rewarding, with approximately 600 physicians represented.

To date, the Professional Relations Department is averaging 175 personal calls per month on individual physicians, providing assistance and information to the physician and/or his medical assistant, to conserve your time and facilitate prompt payment by Blue Shield to you.

Non-participating physicians, consisting of physicians just beginning practice as well as established physicians who are not participating with Blue Shield, are being contacted. To date we have 1,458 participating physicians, a gain of over 100 within the past year. This represents the highest gain in participating physicians in several years.

As a result of the efforts of individual physicians, as well as specialty groups within the State, the Revised Physicians' Manual on Medicare has just been completed. It is felt that this manual will prove to be a valuable tool to those physicians filing on assignments as well as those who use the direct billing method.

At present, our staff is nearing the completion of the revised Blue Shield Manual, with emphasis on brevity and simplicity. Following the printing and distribution of his manual, a series of workshops is planned to provide instructions in its use.

During the past year, the Medical Review Committee of Blue-Cross-Blue Shield has been formed. The purpose of this committe is to assure that

South Carolina physicians obtain maximum consideration for themselves and their patients. This committee, along with the Plan's Medical Director, reviews problem cases and makes recommendations to your Blue Shield Plan. Outstanding physicians throughout the State, broadly representative of the various specialties, have been selected to serve. The formation of this committee enhances the link between the medical profession and Blue Shield.

Even though Blue Shield and the Medical Association opposed Federal Medical Legislation, when Medicare became the law of the land, through the cooperation and assistance of the Mediation Committee of the South Carolina Medical Association, and representatives of the Specialty Groups, Blue Shield has been able to demonstrate a proficiency as a Part B Carrier that is equal to that of any other Carrier in the nation. The reasonable charge program which has been established and is operational in this State has been highly successful, in that over 98 percent of al charges submitted have been found to be reasonable.

Advertising and Public Relations

Our Public Relations efforts are based on a positive approach. Eevery effort is made to tell South Carolinians the contributions made to our State not only by Blue Shield and Blue Cross but also by the medical community and the hospitals.

Releases of all newsworthy items are prepared and distributed to both the print and the electronic media in the State, as well as to special publications.

In addition, we staff booths at various conventions such as the Education Association—attended this year by an estimated 16,000 people—the South Carolina Health and Science Fair—attended by 70,000 persons—the South Carolina Jewelers Association, the South Carolina Public Health Association, and the Law Enforcement Officers Association.

We also maintain close liaison with the South Carolina Press Association, the Broadcasters Association and the South Carolina Legislature.

Medicare

Now a look at Medicare.

For the fiscal year ending June 30, 1967, the first full year of Medicare operations, Part B showed 73,792 claims received and 62,443 paid for a total of $4,535,316.

The first three quarters of fiscal year 1968, there were 115,730 claims received under Part B and 95,098 paid for a total of $5,692,680.

With figures for three months of the fiscal year still to be added, Part B payments are already over the entire 1967 total by more than a million dollars.

An interesting aside to our Medicare operations is that, effective October 1, 1967, permission was finally granted for marketing a Medicare supplemental contract. This contract, which provides benefits to mesh with Medicare benefits at a corresponding charge, had been sought since before Medicare went into effect on July 1, 1966.

Most everyone now realizes that the Medicare program is a permanent and major feature in providing medical care in this country. I would like to inject a word of caution at this point. Health care costs must be controlled. Failure to do so will invite fixed fee schedules and further inroads of government medicine into the private sector. We as physicians, as members of utilization review committees, and by making sure that our own charges are reasonable can accomplish this to a great extent.

Legislature

I know you're all interested in and have been keeping up with the action this year by the State Legislature. Two laws affecting Blue Shield have been passed but I wish to emphasize that neither should have any effect on physician-Blue Shield relationships.

The new law that most directly concerns Blue Shield repeals the original Enabling Act with the proviso that the Plan retains its corporate existence under the original charter and shall be licensed, regulated and taxed as a mutual insurance company. This will be beneficial in that it will relieve us of much of the stringent control that the Insurance Department has had over us and will permit us to offer various coverages that were previously denied us, such a Major Medical.

The second new law provides authority for the administration of Medicare, Medicaid and similar programs.

Another Bill which would apply to direct pay subscribers but not to group contracts has not yet passed. This would authorize the Insurance Commissioner to regulate policies and rates of commercial companies on the basis of their fairness to each other.

Title XIX (Medicaid)

Title XIX, or Medicaid, as you know has been approved for South Carolina and we have been asked by the Department of Public Welfare to submit a bid for administering the portion of the program dealing with physician and dental services, non-hospital out-patient laboratory and X-ray services and prosthetic appliances.

To quote Dr. Carl R. Ackerman, Board Chairman of the National Association of Blue Shield Plans, "Where Blue Shield goes depends upon its capacity to understand and its ability to provide what satisfies the public. If we don't achieve that, the government will extend its health programs to cover most, if not all, of the population."

I will end with a question and a statement.

Where else do we have a direct voice in health care financing like we do in Blue Shield? It is for this very reason that we must keep Blue Shield strong and why we, as physicians, must play a responsible role in Blue Shield.

I want to again express my appreciation to both

the lay and the doctor members of the Blue Shield Board and to the Blue Shield staff for the fine work they continue to do.

Respectfully submitted,
J. Hal Jameson, M.D.

The Chair: I would like to ask Chairman of Council, Dr. Perry, to come forward at this time and present nominations from Council.

Dr. Perry: (Recognized): Mr. Chairman, Council presents the following names for your consideration for the members of the Blue Shield Board:

For renomination for a period of three years:

1) Joseph P. Cain, M.D., Mullins, South Carolina
2) W. West Simmons, M.D., Greenville, South Carolina
3) Mr. Frank S. Adams, Aiken, South Carolina
4) Mr. M. L. Meadors, Florence, South Carolina
5) Wendell H. Tiller, M.D., Spartanburg, South Carolina

For nomination for a period of three years to replace Mr. Wilton F. Mays of Greenville, we present the name of Mr. W. R. Irwin, Clevedale, South Carolina. Mr. Irwin is the Vice-President of Reaves Brothers, a textile manufacturing company located in Spartanburg, South Carolina.

These names come from Council. Are there any other names from the floor to be presented? The vote was taken and passed unanimously.

We now declare the meeting of the corporation of the Blue Shield over.

The Chair: I now ask the House of Delegates to please come to order.

The Chair: We will now hear from the President-Elect, Dr. Joel W. Wyman. (Convention rises and applauds)

Dr. Wyman (Reading) Mr. President and members of the House of Delegates: During this past year I attended the annual meeting of the AMA in Atlantic City in June and also the clinical meeting in Houston in November 1967. I also attended the annual Public Relations Conference in Chicago, along with Mr. M. L. Meadors and Dr. Winston Godwin, in August 1967 and more recently the AMPAC workshop in Washington in March 1968. These were all most instructive meetings and made one conscious of the many problems faced by organized medicine. However, in my opinion the most pressing problem is the pressure of the federal government for socialization of the medical profession, and this should be of immediate concern to every physician.

I have recently reviewed a publication by the United States Department of Health, Education and Welfare relative to a conference held in Washington in October 1967 for the purpose of promoting the group practice of medicine. It immediately becomes apparent when you look at the lists of those who participated that this group of people, which included medical administrators, labor union economists and other people in administrative positions in medicine, were picked to attend this conference because of their known affinity for government programs and the ultimate socialization of the medical profession. Time is not available to give you details of this book at this time but suggest that each of you and every doctor in this state order a copy from the Supt. of Documents, Washington, D. C., Public Health Service publication No. 1750 entitled "Promoting the Group Practice of Medicine." It is a most revealing book. If these plans are carried out they will, in my opinion, destroy our present method of delivering health services which has proven to be the finest the world has ever known under the free enterprise system.

Let me repeat that, if I may, this book is known as "Promoting the Group Practice of Medicine" It is Public Health Service publication No. 1750. It should be ordered from the Supt. of Documents, Washington, D. C., with your check for 30 cents. It will take you about six weeks to get it from your efficient federal government.

As you all know, the government with its many farm programs has destroyed the small farmer, and no doubt the solo practice of medicine will go the same way unless doctors are willing to fight for their rights. I believe that the best way to fight for our rights is through involvement in politics, in order that we may place prudent and conservative representatives in Washington who will block socialized ideas and will preserve the free enterprise system. I, therefore (interrupted by applause) advise and urge all of you and your wives to immediately join AMPAC and SCALPEL in order that we may elect our friends throughout the nation to the halls of Congress.

That is the end of my formal paper.

I have been asked by Council to present to you this, which will take just one moment, and I have penciled some notes on the back of this—Council has asked me to say a few words relative to some change in our meeting schedule next year and the years to follow.

It has been sugested that one night and possibly one afternoon should be reserved for class reunions at a time other than Monday or Tuesday, at which time official functions of the Association are held, and those attending class reunions are therefore unable to attend. Some sugestions have been made, 1) should we begin our meeting one day earlier, that is on Sunday; or 2) should we continue the meeting to Thursday noon with Wednesday afternoon and evening reserved for entertainment, recreation and class reunion, etc.

A committee is being apointed by Council to study this question and your advice is solicited. If you have any suggestions if you will kindly communicate them to me either at this meeting or by letter or postcard I will appreciate it.

Thank you very much.

The Chair: This will be referred to the Reference Committee on Reports of Council and Officers.

At this time we will hear from our Executive Secretary, Jack Meadors.

(This report appears elsewhere in the Journal.)

The Chair: Thank you very much, Mr. Meadors. That report will be referred to the Reference Committee on Reports of Council and Officers.

At this time we will hear from our Secretary, Dr. Ben Miller.

Dr. Ben Miller (Recognized) Dr. Eaddy, Members of the House of Delegates, as I take my leave from the office of secretary I have much to say in recommending the office. If an individual is interested in learning the workings of the society this is the prime position in which to be. The association with council has been most rewarding; the service under the various presidents has been very gratifying to me; the help given to my office by Mr. Meadors has indeed been gratifying so I would like to say a hearty thank you for allowing me to serve as your secretary. My formal report will be published—it will be sent to the reference committee and later published. Thank you, very much.

The Chair: We are deeply indebted to Dr. Miller for his years of devoted service.

(Report of Secretary, Dr. Ben N. Miller, M.D., to House of Delegates.)

This annual meeting marks my completion of six years as your Secretary. These have been most interesting years and much has been learned about the philosophy and operation of the society.

The close association of the Secretary with Council has been very rewarding. The arduous task of Council is carried out with diligence and judgment.

The Secretary is the corresponding officer of the Association and it is his duty to inform the Governor's office of the various nominations by the Association for commission by the Governor. The American Medical Association is likewise informed officially of election of delegates and alternates, and various contracts made by the Association must be certified by the Secretary. Many of the details of the work of this office are expedited by the Executive Secretary, and to him the Secretary is deeply indebted.

I would like to achknowledge to the House of Delegates my gratitude for the opportunity you have given me, and for this privilege I thank all of you.

Signed—Ben N. Miller, M.D.

The Chair: This is referred to the Reference Committee on Reports of Council and Officers.

The Chair: At this time we will hear from the Treasurer—let me see, who is that—oh, yes, Dr. Stokes. (laughter)

Dr. Howard Stokes (Recognized): Mr. President, Dr. Meadors, fellow members of the house—a few people say something nice about Jack and he suddenly becomes a doctor.

Mr. President, fellow members, the Treasurer's report will consist of a summary of finances which I shall read and which represents the actual revenue of our Association for 1967 and the actual expenditure during the same period of time. This report has already been presented to Council. In addition to this summary of the Association's finances, there is also the ofifcial audit which is a part of the Treasurer's report and will be referred to the Reference Committee on Reports of Council and Officers, and will be published in the Journal of the South Carolina Medical Association. (The summary appeared in the July number.)

Now, quickly add this, because even that shows that we were operating in the black, which has become a rather nice experience for most of us on Council and certainly the Treasurer—however, in addition to this balance of approximately $1,000.00, it should also be remembered that during the year we received an income from our investments, from investments in the General Fund, from the Investors Mutual Fund of $4,018.08 and income from the investments of the Permanent Home Fund, $2,719.88.

Our investments at the present time in the General Fund amount to $78,090.37,—$14,004.60 of that being now in the Peoples Federal Savings & Loan Association, and $64,085.77 (and actually that figure has been changed somewhat because of the market fluctuation, even more) in Investors Mutual Fund.

The Permanent Home Fund at the present time has $67,875.22 in it.

So, the South Carolina Medical Association at the present time has no short or long-term financial obligations. A financial balance has been achieved and excess of revenue over expenses amounts to $8,452.00. Of this amount $4,627.00 has been reinvested in the General Fund and $2,119.00 in the Permanent Home Fund. Thus, $7,347.52 actually represents our total income from investments for the year 1967.

The treasurer again wishes to thank the Association for the privilege of assisting in the affairs of this important organization and is deeply appreciative of the constant and tender care of Jack Meadors and his very efficient staff in the business office.

(Applause)

The Chair: Thank you Dr. Stokes, this will be referred to the Reference Committee on Reports of Council and Officers.

(See next page)

The Chair: At this time we would like to hear from Dr. Waring, the Editor of the Journal.

Dr. J. I. Waring (Recognized): I am a little ashamed to get up here every year and say practically the same thing, the same song with a slightly different tune, but apparently the membership doesn't change very much in its ways and the Journal still struggles as best it can. Briefly reporting—

There has been no major change in the Journal in the past year. A change of printers produced some

(The following is a copy of the balance of the report from which Dr. Stokes read certain figures.)

ITEMS HANDLED WHICH ARE NOT REVENUE	
AMA-ERF	$ 4,485.00
AMA Dues	94,995.00
County Dues	840.00
SCALPEL Dues	4,650.00
INCOME FROM INVESTMENTS	
Peoples Federal Savings & Loan Assn.	$ 609.56
Dividends Reinvested (Inves. Mut. Fund)	4,018.08
	$4,627.64
Permanent Home Fund (See Below)	2,719.88
Total Income from Investments	$7,347.52
INVESTMENTS	
General Fund	
Peoples Fed. Savings & Loan Ass'n.	$14,004.60
Investors Mut; Fund—5,683.325 Shrs. $11.273 per share	64,085.77
(Value as of Apr. 30, 1968: 5789.421 shares (each) $11.38-$65,883.61)	
Total General Fund	$78,090.37
PERMANENT HOME FUND	
Aiken First Federal Savings & Loan	$11,344.42
Security Federal Savings & Loan (Aiken)	11,344.45
Anderson Savings & Loan	11,351.82
First Fed. Savings & Loan (Anderson)	11,351.89
Home Bldg. & Loan, Orangeburg	11,339.61
*Pickens Bldg. & Loan	11,143.03
Total Permanent Home Fund	$67,875.22

(This total includes interest earned in 1967 of $2,719.88)

(All of the above currently pay interest at 4½%)

(The Accountant's Report, by Raymon R. Finch & Co., Certified Public Accountants, Columbia, S. C. may be found in the original minutes.)

temporary difficulties of production which have now been eliminated. Advertising revenue has been more satisfactory and we have been able to produce a journal that averages a little larger than those of recent years.

The reticence in writing that seems to characterize the South Carolina physician is still in effect. Papers come hard. The editor's head frequently rests uneasy at the threatening prospect, never fulfilled, it is true, of having to print a journal without scientific articles, or even articles. How kind it would be to your worried servant to drown him in a spate of medical writings of a quality sufficient to justify their transference to print.

Among those who might assist in this much desired event are the specialty societies in the state. Strangely enough, their activities seldom appear in the Journal. Indeed they seem to have a sort of autonomous existence, combined sometimes even with an uncertainty about their true names and their relationship to medicine in general. Your editor has tried to ferret out names of officers, times of meetings, etc., with rather meager results. We wonder why these worthy people don't come out of hiding.

Joseph I. Waring, M.D.

The Chair: Thank you, Dr. Waring. This is referred to the Reference Committee on Reports of Council and Officers.

At this time we will have the report of Dr. Perry, Chairman of Council.

Dr. William L. Perry, Chairman of Council (Recognized): Dr. Eaddy, members of the House of Delegates, (Reading)

Your Council has been quite busy as you will subsequently see.

May, 1967: Authorized bill to provide waiver of warranties of merchantability as to blood and organs transplanted. Voted $200.00 for Health Careers Committee of Woman's Auxiliary. Authorized appointment of investment committee to study investments and make recommendations.

June 14, 1967: Endorsed South Carolina Regional Medical Program historical outline as set up by the Medical College.

October 25, 1967: Approved introduction of bill against advertising by members of the healing arts. Appointed committee to assist Hospital Association in forming rules for release of information on patients by hospitals. Approved press code for news media. Discontinued subcommittee on Cancer. Authorized Chairman to appoint committee to study ways and means of assisting SCALPEL without jeopardizing Association's tax status. Approved general statement recommended by Committee on Legislation for involuntary commitment of alcoholics, subject to submission to members of House of Delegates by mail. (Statement was so submitted and objections negligible.) Agreed to transmit letter explaining regional medical program, and this was done. Authorized Chairman to appoint committee to assist in preparing guidelines for drugs to be included under Title XIX. This was done and compliments are in order for their work. It was well received. Adopted budget.

January 17, 1968: Osteopathic discussion—executive session with Dr. McCord present. Approved action by S. C. Diabetic Association to establish a camp for diabetic children in upper South Carolina.

February 18, 1968: Approved plan under H. R. 10 submitted by the General Agency of Charleston, providing combination of insurance and retirement investment benefits.

Some people appeared before Council, namely:

Dr. Don Kilgore reappeared on the behalf of SCALPEL.

Dr. Thomas E. Hair, Chairman of the Committee on Medical Education appeared on matters concerning ETV.

Dr. C. C. Wannamaker reported for Dr. Judson Hair on activities of the Committee on the Medical Aspects of Sports.

Dr. Josey presented nominations for the Blue Shield Board. (which we have already presented this morning.)

Dr. Frank C. Owens presented proposed Senate law, S. 925, regarding rediation hazards and protective measures under the Workmen's Compensation law. Dr. Harvey Atwill discussed the proposed bill and indicated that there was a service through the public health department which would certify equipment as to safety. This service is free to all physicians in the state, x-ray equipment, that is.

Dr. Harrison Peeples, Vice President, reported on the progress from SCALPEL.

Dr. Harvey Atwill reported, as Chairman, from Council's Committee on Assistance to SCALPEL. He recommended three areas of assistance to SCALPEL: 1) Monies supplied from the South Carolina Medical Association can be used for educational purposes without jeopardizing the Society as an elemosynary, tax-free body. 2) He suggests promotional efforts through the Newsletter, Journal, etc., regarding the activities of SCALPEL. 3) SCALPEL should present an objective report to the annual meeting regarding progress, finances, etc. (It is suggested that this be a yearly affair.)

The Regional Medical Program was discussed by Council. The program has been approved as outlined by Dr. Charles P. Summerall.

Article VIII of the Constitution provides that the place for holding each Annual Session shall be fixed by the House of Delegates. The time for holding the meeting is fixed by Council.

It has been customary for the House to fix the place of the meeting one year in advance. The time has now arrived, however, when it seems to be necessary to make a change. Myrtle Beach has become such a convention city and the Ocean Forest such a convention hotel that their convention dates are being set as far as two years in advance, and we think the House should make its decision as does the A.MA. and most other organizations, to accommodate this development. According, Council recommends to the House of Delegates that the annual meetings in 1969, 1970 and 1971 be held at the Ocean Forest Hotel, Myrtle Beach, the specific dates to continue to be fixed by the Council.

Mrs. William J. Strohecker, President, reported for the Ladies Auxiliary. Council was amazed at the numerous activities engaged in by the Auxiliary, and proud to have them represent doctors in their communities. Council compliments her most highly for her efforts and accomplishments. She presented Mrs. Peter Gazes, the incoming president.

Council received the Treasurer's report and thought it was excellent, and we compliment the Treasurer on a job well done. The Executive Secretary, Mr. M. L. Meadors is completing 24 years with the South Carolina Medical Association. His report included a progress report which showed a gain in membership and over-all solvency of the Association. We compliment him for his work.



Panel on Sex Counselling

I would like to take this opportunity to thank the Sixth District for allowing me to be their Councilor for three full terms. I want to thank Council, as a whole, for their untiring efforts and for a job well done. Every member accepted his assignments willingly and cheerfully and did a superb job. I expressly want to thank Council for allowing me to be their Chairman for the past two years. These experiences will be treasured for the rest of my life.

William L. Perry, M.D., Council

The Chair: Thank you very much, Dr. Perry. Those were nine long years, I know. This report will be referred to the Reference Committee on Reports of Council and Officers.

At this time we will hear from the delegates to the American Medical Association and we would like to take the best looking one first—they can decide among themselves.

(Applause when Dr. Joseph Cain comes forward to give his report.)

Dr. Joseph P. Cain, Jr. (Recognized): Thank you, Mr. President, how did you know?

Gentlemen, there is a reversal in order in allowing the Junior Delegate to speak first because I am going to report on the Annual Meeting and Dr. Johnson will report on the Fall Meeting. We thought it would be better in chronological order.

I have a report to you gentlemen of the House of Delegates which, first, will be a brief resume of the meeting, and second, specifically as to what happened to the resolutions which we introduced from South Carolina into this convention. Also, I will list the headings of the various actions that were passed. If anyone wants specific information on those particular headings I will be glad to supply what I can.

ATLANTIC CITY, N. J.—June 22, 1967—Between the Speaker's call to order at 10:00 a.m. Sunday in the Pennsylvania Room of Haddon Hall and the last voice vote at 1:12 Thursday afternoon, the

American Medical Association's House of Delegates set two records.

One was attendance. After 95 per cent of the authorized delegates attended Sunday's opening session 100 per cent—242 delegates out of 242—were in their seats for both the Tuesday and Wednesday deliberations. Thursday, the final day, attendance stood at 240.

The other was accomplishment. All told, the House was presented with 151 items of business on which action had to be taken, including a record total of 123 resolutions from state medical associations; 18 reports from the Board of Trustees, three of which were nominations to fill Council positions; 4 reports from the Council on Medical Service; 3 reports from the Council on Constitution and Bylaws, one produced during the convention in order to implement an adopted resolution; 2 reports from the Council on Medical Education; and 1 report from the Judicial Council nominating affiliate members of the Association.

Dwight L. Wilbur, M.D., San Francisco, Cal., was elected president-elect. Dr. Wilbur has been a member of the Board of Trustees since 1963. He will serve in his new capacity for one year and will be installed as the Association's 123rd President at its annual convention in his home city in June, 1968.

Now, gentlemen, what I am about to tell you will be in a sense repetitious since this report was made to you last July after our return from the convention and published in the News-letter of the Association. However, I think it will be well to read these and tell you what happened.

Resolution—the subject, which was support of Hospital-Based Specialists, Resolved that the South Carolina Medical Association supports the position of A.M.A. in regard to hospital-based specialists, and further

Resolved, that South Carolina Medical Association oppose attempts in Congress to force hospital-based specialists to bill their patients under Part A of Medicare or in any other manner other than the law now allows, and be it further

Resolved that all South Carolinians in Congress and the Senate be notified of this resolution.

Now, this was presented, in amended form, of course, to make it conform to the House of Delegates to the A.M.A. Now, this was referred to Reference Committee who considered it along with a similar resolution from Missouri and the following was the report which was recommended by the Reference Committee and adopted by the House of Delegates. (Reading from Newsletter of SCMA, June-July, 1967)

Your committee joined for consideration Resolution 32 introduced by the Missouri Delegation, and Resolution 86 introduced by the South Carolina Delegation. Both resolutions urge the rejection of any change to Public Law 89-97 which would treat hospital-based specialists in a manner different than other physicians.

The Committee was advised by representatives of the Council on Legislative Activities that the position suggested by the resolutions is the policy of the Association and was most recently enunciated by Dr. Charles L. Hudson in his testimony to the House Ways and Means Committee on H. R. 5710, a bill that would amend the Medicare Act. At that time the A.M.A. clearly rejected the Part C concept and forcefully again states its position that hospital-based specialists must remain under the Part B program.

This recomendation was adopted.

Our next resolution was "Opposition to the Hart Bill (S. 260, 90th Congress.)"

This was referred to Reference Committee and was considered along with a similar resolution from the Wisconsin Delegation.

The following was the report of the Reference Committee, which was adopted by the House: (reading from Newsletter)

Resolutions 44 and 87 urge the Association to oppose S. 260. 90th Congress, (the Hart Bill) the Medical Restraint of Trade Act. We were informed by the representatives of the Council on Legislative Activities of the testimony of Immediate Past President Doctor Appel, in opposition to the bill before a committee of Congress, and of the efforts of other physicians, state and local medical societies, AMA councils, the Board of Trusteees and AMA staff in bringing to the attention of Congress and the public the dangers inherent in the adoption of this measure. We heartily commend all these people for their efforts and recommend that this House of Delegates reaffirm the Association's opposition to this type of legislation. This was passed.

Our next resolution was on "Compulsory Generic Prescribing". This was referred to Reference Committee who considered it along with similar resolutions from New Jersey, California and Kentucky Delegations. The following resolution was adopted. (Reading from Newsletter)

Whereas, There are current questions being raised as to whether the prescribing of drugs might be restricted to the use of generic names without any adequate justification for such a restriction; therefore be it

Resolved, That the AMA again reaffirm its policy that physicians should be free to use either the generic or the brand names in prescribing drugs for their patients; and encourage physicians to supplement medical judgments with cost considerations in making this choice.

The next resolution "Medical Ethics and the Armed Forces"

"Your Reference Committee is in agreement with the intent of Resolution 89 but in lieu of the Resolution the Committee proposed the following substitute statement. (They didn't like our wording and I think their substitute statement carries the sense of

our resolution pretty well.)

Your Reference Committee is of the opinion that there is no conflict between the ethics of the medical profession and the oath which officers must take when sworn into the Armed Services. This oath, applicable to medical and other officers, provides that all officers shall support and defend the Constitution of the United States against all enemies, foreign and domestic, that they will bear true faith and allegiance to the Constitution of the United States and that they take such obligation freely and without any mental reservation or purpose of evasion. There is nothing in this oath which conflicts in any way with the ethics of the medical profession. Your Reference Committee recommends approval of the foregoing statement."

This statement was approved by the House of Delegates.

Resoltuion No. 101—"Congressional Investigation of the Department of Health, Education and Welfare."

This was referred to Reference Committee who considered it along with similar resolutions from the Florida and from the Louisiana Delegations. The following substitute resolution was brought in: (Reading from Newsletter)

Resolved, If legislation is introduced to investigate the activities of the Department of HEW and its executive personnel who are concerned with health matters to determine if the intent of Congress is being carried out, the American Medical Association will present to such investigation what information we have; and be it further

Resolved, That since the most effective method to prevent the ultimate destruction of the private practice of medicine is in the election of proper officals at all levels of government, the American Medical Association urges that physicians as individuals redouble their efforts in political activities to elect those officials who are truly representative of the "grass roots" and who share our philosophy; and be it further

Resolved, That the American Medical Association continue and expand its efforts to inform our membership of its activities to represent them, particularly before the Congress and the federal agencies."

Now, that was the recommendation brought in by the Reference Committee to the House of Delegates. We thought it was a rather weak-kneed version of our resolution. This final version which was adopted is definitely a watered-down version of the resolution and your delegation considered trying to strengthen it on the floor. However, the temper of the Reference Committee seemed to be against a strong censorship of H. E. W. at this time and, even though there were sporadic evidences of support, (from the floor,) it is doubtful if we could have amended the resolution of the Reference Committee.

Accordingly, using our best judgment (as your delegates) in view of the foregoing circumstances your delegation felt that it would be better to reintroduce our resolution at the Clinical Session, in Houston, Texas, by which time we hope there will be some activity in Congress to which we could refer and for which we could gather some support."

This was done, and it was re-introduced at the Clinical Session, at Houston. This will be covered in Dr. Johnson's report.

Our other resolution concerned "Certification and Recertification". You remember we were quite upset in our society by the fact that hospitals were insisting that doctors sign the certification and recertification report which we felt was not lawful and we hoped that something might be done about it.

We passed that resolution in our Association and we introduced it to the American Medical Association. However, much to my surprise, when the Reference Committee considered this resolution, it came back with the recommendation that it **not** be approved.

However, we felt that this resolution was so important that your Delegation moved that a substitute resolution be approved instead of the adverse Reference Committee report.

(Reading from Newsletter)

"This resolution, which we felt strongly supported the position of most physicians in the United States was adopted and reads as follows:

"Resolved, That the A.M.A. continue to call on Congress to repeal the requirements for Certification and Recertification now present in the Medicare law, and that in the meanwhile it urge Hospital Staffs to adopt a policy which will accomplish certification and recertification by the use of Admission and Progress Notes already on the charts, rather than on prescribed forms now in use by many hospitals."

That resolution was adopted as the policy of the American Medical Association.

The items which were covered during this convention:

1. Therapeutic Abortion
2. Health Care Cost
3. Government Health Programs
4. Physician Control over Collection and Disbursement of Professional Fees.
5. The Millis Commission and Commission on Research
6. Medicine and Osteopathy
7. Medical Manpower
8. Committee on Planning and Development.
9. Political action
10. Generic Prescribing
11. Miscellaneous Actions
12. Membership Disability Programs

Now, you remember last year we had quite a number of people in this state concerned over the fact that our AMA Health Insurance was being terminated by the carrier, which was Continental Insurance Company and they had substituted another

policy, for this one, which was not nearly so liberal toward the older members of the Association. I don't know of any one thing, not even back yonder when Medicare law was being fought, that the delegates received so many comments, so many letters from the members of the various associations as we did about this insurance program. So, I think it would be of a great interest to the delegates, here, to know that a program similar to the one which was in effect last year and which was canceled out by the Continental Insurance Company, was re-introduced to the Association and is now carried by the Fireman's Fund. Now, this is on a trial period of five (5) years after which both sides can renegotiate. So, those of us who have friends who were worried about this particular thing might carry the word back to them that the insurance program, as originally stated, is now still in effect but with a different company.

The other thing of interest to doctors of South Carolina, of course, is the election of our good friend Dr. Edward R. Annis to the Board of Trustees. It is of interest to know that he won on the first ballot over two opponents.

That, gentlemen, is my report. If there are any questions on the items which I mentioned I will be glad to go into more detail with you. So much business is being carried out that I think we just have to hit the highlights, thank you very much. (Applause)

The Chair: This report will be referred to the reference committee on Reports of Council and Officers.

At this time I would like to hear from the other delegate from A.M.A., Dr. George Dean Johnson.

Dr. George Dean Johnson (Recognized): Mr. President, members of the House of Delegates, I would like to tell you first about the re-introduction of the resolution to have the Department of HEW investigated as to their political beliefs. It was introduced and a number of people talked in favor of it and to our great dismay and surprise Dr. Ed. Annis spoke against it. The arch conservative had changed to a "middle of the roader." Later, when we asked him "Why?" He said, that after he got on the Council, The Board of Trustees, that he realized we would be more effective in our supplication from HEW for morsels if we did not try to have them investigated for socialism.

The resolution was disapproved by the Reference Committee and then in a last ditch effort we appealed to the House of Delegates to approve it and there were 5 votes on our side out of 240. Joe and I spoke up loudly. I hope Tom Parker added his although he wasn't entitled to a vote. We had one vote from Dr. Sammons of Texas, who spoke here last year, or year before, and another vote from Louise Gloutner, from Pennsylvania, who said she felt sorry for us.

The legislative round-up came last week and I am going to read from it. This has nothing to do with my report but I thought you ought to hear it.

"Wilbur Cohen spoke before Senator Ribicoff's committee and according to usual he blamed the high cost of medical care on increase in doctor's fees and inefficiency because all of us do not practice group practice, but this is what I want you to hear.

"During the extensive question and answer period which followed Mr. Cohen's testimony, Subcommittee Chairman Ribicoff asked: "Now, three witnesses this week, one Dr. Fucks, a medical economist; Governor Rockefeller of New York; and Mr. Smith, Chairman of the Board of the Aetna Insurance Company in one way or another all seemed to favor a universal health insurance program. Do you see any merit in a universal health insurance program?" Mr. Cohen replied: "I would have to say first, Senator, as you know, I strongly favored such a universal health insurance program as it was advocated in this country in the 1940's. I think that from the experience that we have had in the last two years I have come to the conclusion that it is a much more monumental task than was first apparent. Our system in this country is so complex, and we have such serious manpower shortages, that I would not want to say that at this moment we could work out a blueprint for a universal comprehensive system that would be workable and usable in the American situation. I think it would be better to go at this problem in terms of looking at the priority needs that exist and in meeting those, than trying to find a kind of simple blueprint that would probably not fit all of these various conditions." . . . Following the questioning of the Administration witnesses, Senator Ribicoff adjourned the Subcommittee subject to the call of the chair."

I thought you would be interested in that little bit of information that came this past week.

"Summary of Actions of the House of Delegates at the Interim Session in Houston." (Before going on with the report) Joe Cain didn't get out on Saturday, he made the mistake of waiting to see the Carolina—Clemson game, since he went to Carolina—but it started on Sunday)

(Reading report) "Our President, Dr. Rouse, called for positive and visible action by physicians. (And I quote from his speech) "The future of the individual physician, of patient care, and of the methods by which it will be made available to all people do not depend upon our efforts alone. They depend also on the future attitude of the nation towards free enterprise; on the degree of national respect for individual initiative; and on the extent of future over-all acceptance of the concept that personal satisfaction and personal benefit are to be gained principally through personal endeavor." Dr. Rouse went on to state, "When private citizens abdicate their responsibilities and ask the government to do a job, government responds in the only way it can; it passes more laws—and every time

a law is passed, it means another small or large restriction on somebody's freedom."

As regards current problems Dr. Rouse feels that our biggest problem lies in the cost of health care and the growing need for more effective cooperation among health care professionals and sub-professionals. Dr. Rouse feels that the time has come for orderly, planned, meaningful change, not in the fundamentals of ethics or the devotion to excellence, but in the more material features of efficiency, cost and methods of delivery of health care. (As most of you know between 1955 and 1965 the population increased 17%, the doctor population increased 22%, but the services the doctors render increased 83%, and that is where the rub is.) Dr. Rouse concluded by stating; "Let us not make it necessary for anybody else to direct the furnishing of these services." (I was delighted to hear the Charleston Delegation's resolution on comparing the cost of the health care that Wilbur Cohen always throws at us with the cost in the Veterans Administration Hospital)

The house dealt with 96 items of business including 17 reports from the Board of Trustees; 20 from the four Standing Committees of the House; one special report each from the AMA-ERF and the Commission to Coordinate the Relationships of Medicine with Allied Health Professions and Services; and 57 resolutions from state societies and individual physicians.

Owen H. Wangansteen, M.D., Director of Surgery at University Hospitals, Minneapolis, was named the winner of the 1968 Distinguished Service Award. For the first time the recipient was selected at the Clinical Session and he will receive the award at the annual meeting in San Francisco.

The house approved moving the AMA-ERF Institute for Biomedical Research from AMA Headquarters to the campus or near the campus of the University of Chicago. At the same time the Board of AMA-ERF will be required to present a budget of the Institute for the ensuing year and the amount of the projected contribution from the AMA during that period.

In medical education the summary of the Board of Trustees on the Report of the Commission Research was approved. Recommendation No. 12 encouraged research into the delivery of Health Care "provided it is conducted under proper auspices and in accordance with sound research design and methodology."

The House reversed its previous stand and approved Recommendation 13 which urged greatly increased amount of money for operational expenses of medical schools, to be matched by these schools through private or local governmental sources. The House urged that local matching funds be raised to help the medical schools remain independent.

(The above was a marked departure from the previous policy of the House. Heretofore it had always been brick and mortar much like the Hill-Burton group, but now there is such a hue and cry for more money that the House has finally given in.)

The House adopted a resolution that the Council on Medical Education "utilize all appropriate influences to restore teaching to its proper place of prominence in medical education" instead of giving the lions share of attention ,honors and contributions to research scientists. Twelve guidelines for medical staffs in hospitals with intern and resident training programs were approved.

Health Care

One of the reports on this subject emphasizes that standards of medical care are set at the local level, and calls attention to disturbing trends pointing to the possible establishment of medical care standards on a national basis. Another commits the AMA to leadership in informing the public, and the profession as to practical means of moderating health care costs, the value of voluntary health insurance, expanding the medical manpower supply and improving the health care of the American people.

Medicare and Medicaid

The House reaffirmed its support for direct billing under the federal program and adopted a resolution regarding the collection and dissemniation of figures on the administrative costs of Medicare.

Another resolution was adopted which urges the AMA to continue its efforts to provide for the implementation of Title 19 in a manner which recognizes "the physicians right to bill directly all patients, including Title 19 patients and allow the physician or his patient to be reimbursed his usual, customary and reasonable fee for his professional services."

Other Legislative Matters

A resolution urging continuing opposition to S-2299, The Long Drug bill, was adopted.

The House adopted recommendations that the AMA arrange a meeting of state medical association representatives to plan regional conferences of physicians to discuss matters of special interest to state legislators, and that state associations invite key lawmakers to attend AMA conferences. Support for Ampac was reaffirmed. (Also Local State Pacs)

Hospitals

Because both Medicare and Medicaid provide payment for medical care rendered to patients by residents, the House resolved that the association should study the problem and develop guidelines that are acceptable to supervising physicians, teaching institution and government agencies involved in the payment process.

The House reaffirmed its opinion that physicians should be represented on the Board of Trustees of a hospital by a physician or physicians.

Convention Sites for the next seven years

Annual

1968 San Francisco—June 16-20
1969 New York—July 13-17
1970 Chicago—June 21-25
1971 Atlantic City—June 20-29

1972 San Francisco—June 18-22
1973 New York—July 15-19
1974 Chicago—June 16-20
Clinical
Miami Beach—Dec 1-4
Denver—Nov. 30-Dec. 3
Boston—Nov. 29-Dec. 2
New Orleans—Nov. 28-Dec. 1
Atlanta—Nov. 26-29
Anaheim, Cal. Nov. 25-28
Portland, Ore.—Dec. 1-4

The House adopted a statement of 11 purposes and responsibilities for the AMA designed to define more clearly the over-all purpose as written in the Constitution. "To promote the science and art of medicine and the betterment of public health."

The House reiterated its serious concern with respect to the Blue Cross association's request for government funds for its research project on group practice.

Criteria for the evaluation of medical programs of national voluntary health agencies were adopted.

Three resolutions, referred to the board, pointed out that news stories criticizing the rising cost of health care place all or most of the responsibility squarely on physicians."

(This is nothing new. At every meeting of the Council of AMA with the Council of HEW the Council of HEW started out with this sentence "Doctors' fees are too high" that has been reiterated at every meeting.)

Gentlemen, this concludes my report and I want to thank you for allowing me to represent the South Carolina Medical Association at the American Medical Association for the past 14 years and I request that my name not be put up to succeed myself. My associates have been very understanding over these 14 years but their patience is getting a little thin and after 14 years I think it is high time for somebody else to take my place. Thank you very much.

The Chair: I tell you right now that the two men in organized medicine in this state who have the hardest job are Dr. George Johnson and Dr. Joe Cain.

This completes the Reports of the Officers and at this time we will go on to the Reports of the Committees and their reference to the Reference Committees. Now, most of these have been printed in the Journal. If you have any supplementary remarks please stop me as I go on from one to the next one. We will try to move along as fast as we can.

All of these reports of these committees, as I say, have been reported in the Journal or else are on your desk. They have been referred, you will see where they go and you can express your interest at the Reference Committee meetings.

The Chair: If there are no further announcements or no old or new business we stand adjourned until tomorrow morning at 9:30.

To be continued

COMMITTEE REPORTS SUBMITTED AT ANNUAL MEETING

REPORT OF THE LIAISON COMMITTEE OF THE S. C. MEDICAL ASSOCIATION TO THE STATE DEPARTMENT OF PUBLIC WELFARE ON TITLE XIX

During the past two years your Liaison Committee has had several meetings with the South Carolina Department of Public Welfare. The attitude of the South Carolina Medical Association on the implementation of Title XIX was communicated to the Department of Public Welfare. As was brought out in last year's report, the Department of Public Welfare was designated tthe State Agency for administration of Title XIX. The Department of Public Welfare cooperated in an excellent manner with your Committee.

The desirability of having free choice of physicians by recipients of the benefits of Title XIX was impressed on the Department of Public Welfare and the plan included that provision. There are still some negotiations going on between the hospitals, the State Board of Health and the Department of Public Welfare as to the handling of clinic cases of those entitled to the benefits. In the main this is being resolved with the patient having the choice of going to his private physician or attending a clinic.

Another point of discussion was the fees to be paid. The Department of Public Welfare advised us that the fees will be the "usual and customary fees" charged in a community.

The South Carolina State Plan was submitted and resubmitted to Washington. It was recently accepted. This plan provides in the main as follows:

Those eligible will be those presently on the Department of Public Welfare rolls. Any new applicant for benefits will be processed through the local Department of Public Welfare office. Each beneficiary will be given a dated card which can be shown to the hospital, physician, or pharmacist to show that he is eligible. It is expected that the cards will be kept current monthly, in that a new card will be sent with each Welfare check. Children with their ages will be listed on the card.

Benefits furnished will be as follows:

1. Doctor's services, in or out of the hospital.
2. Laboratory and X-ray services.
3. Inpatient Hospital Services. (The S. C. Plan provides for 40 days per calendar year in the hospital.)
4. Skilled Nursing Home Services. (The S. C. Plan provides for 365 days' care per year.) Services in institutions for Tuberculosis or Mental Diseases are not covered under this act. They are under another category.

5. Outpatient Hospital Services.
6. Drugs in Accordance with an Adopted Formulary.
7. Some Emergency Dental Care.
8. Home Care Visits—100 per year (will largely be made by Health Department Nurses).

There was a special Committee set up to establish a list of drugs for which the Department of Public Welfare would pay. In the main this list comprises drugs which would be life saving or would prevent hospitalization. This Drug Committee worked hard on this task. A copy of drugs for which the Department of Public Welfare will pay is being furnished all physicians and pharmacists. If it is felt by the Medical Profession that some additional drug should be included, a procedure is set up for recommendation by the Doctor and study by the Committee and inclusion if felt justified.

Title XIX provides that an Advisory Committee be established for the Department of Public Welfare on Title XIX. This Committee has been appointed by the Governor and will shortly hold a meeting. There are seventeen members. Among the members of the Committee are the following: From the S. C. Medical Association; Dr. Joe Cain and Dr. Thomas Collum; Medical College; Dr. William McCord; State Hospital; Dr. William Hall and Dr. Roy Suber; State Board of Health; Dr. Kenneth Aycock and Dr. Hilla Sheriff. The Hospitals, the Nurses, the Nursing Homes, the Dentists, the Pharmacists, representatives of Labor and of Industry, and several representing the general public are included.

The State Board of Health has a contract agreement with the State Department of Public Welfare in fields in which they have interest. This is largely the approval of Hospitals and Nursing Home facilities and certain clinics which the Health Department has been sponsoring.

There are a certain number of Welfare recipients who are not eligible under Title XIX. Present plans call for furnishing the same benefits to those people. In those cases there would be no Federal participation. There are some who are entitled to Medicare as well as Medicaid. As a rule Medicare would supercede; however, it is the intention of the Department of Public Welfare to pay the first $40.00 of hospital charges. The Department of Public Welfare will also pay the first $50.00 deductible on Medicare cases and the 20% not paid by Medicare. This is for eligible Medicaid cases.

The State Plan has been accepted by Washington, the mechanics are presently being worked out. A pamphlet will be sent to all Doctors, Hospitals, Pharmacists and Welfare Recipients outlining the Program and with questions and answers for the enlightenment of those who are interested. The present target date for the implementation of Title XIX in this State is June 1, 1968.

With the formation of the Advisory Committee to the Department of Public Welfare on Title XIX as appointed by the Governor, it appears that the continuation of the Liaison Committee is unnecessary. The Advisory Committee covers all of the categories covered by the Liaison Committee and it has an official status. I would, therefore, recommend the discontinuance of the Liaison Committee.

Respectfully submitted,
Frank C. Owens, M.D., Chairman

REPORT OF THE MEDICAL ADVISORY COMMITTEE TO SELECTIVE SERVICE FOR SOUTH CAROLINA

The 1967 call for doctors for the Armed Services by Selective Service was for 22 men. The first priority was the graduating Intern. There were 10 of these available to fill the call. These were used. It was then necessary to go into the Residents and those in private practice. The remainder of the call was filled from those sources.

The 1968 call is for 5 men so far as South Carolina is concerned. This is Call No. 42. There was one request for deferment, however your Committee felt that this request should be refused. This call will go out about May 15 with reporting date of July 1, 1968. As a practical matter the reporting dates will probably be in July or August.

There was one other case acted on by your Committee and that was the case of a doctor who already held a commission in the Reserve and was therefore not under Selective Service. This man was ruled essential by a majority vote of your Committee.

I want to take this opportunity to thank the members of the Medical Advisory Committee to Selective Service for their fearless and impartial decisions on the cases presented to them.

The needs of the Armed Services are paramount and it has been the most unusual case which merited the decision "essential."

Respectfully submitted,
Frank C. Owens, M.D.
Chairman



MRS. DAVIS DE LEON MOISE

The newly chosen president-elect of the Woman's Auxiliary, Mrs. Moise, is a native of Georgetown County and was graduated from Columbia College. She has taught school and served in the WAVES. She completed study in medical technology at Duke University in 1948 and began work in the laboratory at Tuomey Hospital. She became head technician.

Mrs. Moise was married in 1955 and has four children. She is on the board of the Women of Trinity Methodist Church in Sumter, a member of the board of the YWCA and PTA. She has participated in many voluntary organizations and other health programs.

SPECIALTY SOCIETIES IN SOUTH CAROLINA

CENTRAL SOUTH CAROLINA OPHTHALMOLOGICAL SOCIETY'S officers are J. B. Workman Jr., president; Shepard N. Dunn, M.D., vice president; Robert P. Bland Jr., M.D., secretary; Edward D. Hopkins Jr., M.D., treasurer.

SOUTH CAROLINA SOCIETY OF INTERNAL MEDICINE recently elected new officers. They are Dr. James L. Wells of Orangeburg, president; Dr. Wilson Greene Jr. of Sumter, vice president; and Dr. Paul R. Staley of Charleston, secretary-treasurer.

CAROLINA UROLOGICAL SOCIETY is primarily an organization of the North Carolina urologists with courtesy privileges to the South Carolina group. The next meeting will be held in 1968, and for the first time the organization is meeting in South Carolina at Myrtle Beach.

SOUTH CAROLINA SOCIETY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY will meet jointly with the North Carolina Society September 22-24 at the Blockade Runner Motor Hotel at Wrightsville Beach, North Carolina. Speakers for the meeting include: Dr. Joseph Ogura of St. Louis, Dr. Jack Pulack of Rochester, Minn., Dr. Art Keeney of Philadelphia, Dr. Philip Knapp of New York and Dr. Edward Norton of Miami.

Officers of the Society are Dr. Frank W. Nicholson of Spartanburg, president; Dr. Frank Stanfield of Anderson, president-elect; Dr. Earl Jones of Florence, vice president, and Dr. Roderick Macdonald of Rock Hill, secretary-treasurer.

SOUTH CAROLINA THORACIC SOCIETY recently elected new officers. They are: Dr. William H. Lee Jr., president; Dr. Lucien E. Brailsford, vice president; Dr. Thomas F. Goldie, secretary-treasurer; Dr. Robert Galphin Jr., ATS representative councillor; Dr. Edward F. Parker, SCTS nominee for Tuberculosis Advisory Committee.

The pamphlet on the Cost of Hospital Care, prepared by the South Carolina Hospital Association is still available for distribution without cost from the South Carolina Hospital Association, Post Office Box 75, Columbia, S. C. 29202.

THE THREAT OF LABOR'S BILL HR — 14816

JOSEPH L. GOODMAN, M.D.

Charleston, S. C.

A ship at sea began to sink and the passengers jumped into a lifeboat. They were still far from land when one of the men began to bore a hole in the bottom of the boat. "Don't do that!" the others shouted. "Why not?" said the man. "I am only boring under my own seat." "Yes", said his companions, "but when the sea rushes in we will all be drowned with you."

Like men in a boat at sea, what deprives one of us in the medical profession deprives us all.

A Bill HR-14816 written for Labor in the House of Representatives authorizes the Secretary of Labor to set standards to assure safe and healthful working conditions for working men and women; to assist the States to participate in efforts to assure such working conditions; to provide for research, information, education and training in the field of occupational safety and health for other purposes. This Act is cited as the "Occupational Safety and Health Act of 1968." The Congress finds that—

(1) personal injuries and illnesses arising out of work situations which result in death or disability are an increasing source of tragedy and extreme hardship for workers and their families, and that the number of such injuries and illnesses has reached such sizable proportions in the Nation as to reduce to a serious degree the effectivensess of the manpower resources in the United States and thereby impose a substantial burden upon, interstate commerce in terms of lost production, wage loss, medical expenses, and disability compensation payments; and

(2) the public health and welfare of the Nation is endangered since occupational injuries and illnessses involve a large part of the population either as victims of such injuries and illnesses or as members of the victim's families.

Because of these two findings, Congress declares it to be their purpose and policy through the exercise of its powers to regulate commerce among the several states and to provide for the good and general welfare, to assure so far as possible every working man and woman in this Nation safe and healthful working conditions.

They therefore intend to establish by this act mandatory occupational safety and health standards applicable to businesses affecting commerce by providing for (1) the effective enforcement of such safety and health standards, (2) by providing for research relating to occupational safety and health, (3) and by providing for training programs to increase and improve personnel engaged in the field of occupational safety and health, (4) by more clearly delineating the responsibility of the Federal Government in its activities related to occupational safety and health in the private sector (5) by providing grants to the States to assist them in identifying their needs and responsibilities in the area of occupational safety and health, to develop plans in accordance with the provisions of this Act, and to conduct experimental and demonstration projects in connection therewith (6) by providing for appropriate accident and health reporting procedures which will help achieve the objectives of this Act.

The Government then will set standards for industry under Section 3 of this Act which says that any empolyer engaging in a business affecting commerce shall furnish a place of employment which is safe and healthful and shall comply with the standards prescribed.

The Secretary of HEW is authorized to appoint such advisory committee or

boards as he deems appropirate; use, with their consent, facilities of Federal agencies with or without reimbursement, and with the consent of any State or political subdivision accept and use the agencies of such State or subdivision with or without reimbursement to employ experts and consultants or organizations, to compensate individuals so employed and allow them travel expenses.

There will be inspections and investigations under this Act in order to carry out the purposes.

If upon inspection the Secretary of Labor determines that any person has violated the provisions of this Act or the regulations and standards established, he shall hold hearings, issue orders, and make such decisions as are deemed to be necessary to enforce the provisions of the Act. If an inspection and investigation discloses that a violation may result in imminent harm to the safety and health of 'he workers, the Secretary of Labor may issue an order providing for the immediate cessation of such violation, and further, prohibit the employment of any persons in locations or under conditions where such violations exist, except to correct or remove the violation.

The Secretary of Labor shall provide for the establishment and supervision of programs for the education and training of employers and employees in the recognition, avoidance, and prevention of unsafe working conditions in employments covered by this Act, and shall consult with the employers as to effective means of preventing injuries and illnesses. The Secretary of Labor may bring suit in any District Court of the United States to enjoin or restrain the existance of such conditions or practices.

Any person who violates or fails or refuses to comply with Section III of this act or any orders issued under Section VI of this act shall be subject to a civil penalty of not more than $1,000 for each such violation.

Any person who willfully violates or refuses to comply with the provisions of the Section III of this act shall be guilty of a misdemeanor and upon conviction shall be punished by fine of not more than $5,000.00 or by imprisonment or by both. Any person who interferes with any person while engaged in the performance of inspections or investigatory duties under this act shall be fined not more than $5,000.00 or an imprisonment of not more than three years or both.

Last year about half of the work force was covered and then only part of the time. In summary, the proposed Bill will empower the Secretary of Labor to set and enforce new standards of job safety for 50 million employees involved in interstate commerce. It would impose "strong sanctions, civil and criminal, of those who endanger the health of the working man" the message said. The measure would also provide help to start and strengthen their own federal health and safety programs for protecting workers in interstate commerce.

Contrary to the Government's viewpoint, it is generally recognized that in many industries the worker is safer in his job than away from it. This is the result of many years of effort on the part of many people. The development and improvement of personal safety equipment and devices and programs in safety and health education have contributed materially to the employee's safety and health. In almost all industries the rate of absenteeism resulting from non-occupational illnesses and injuries far exceeds those for illnesses and injuries which are causally related to the job.

Dr. J. .F. McMann, President of the Industrial Medical Association, has presented the history and objectives of the Industrial Medical Association, which for 52 years has fostered the study of the problems peculiar to the practice of industrial medicine and surgery; these were to encourage and foster development of methods adapted to the conservation and improvement of health among workers

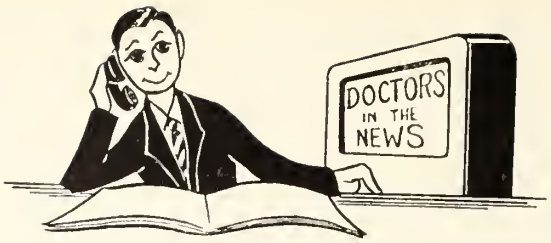
and to promote a more general understanding of the purposes and the results of medical care and health maintenance of these workers. The comments of the Association were intended to be constructive and practical, since in accidents and environmental control of health hazards the experience of major industry differs from that of small industry. In many of the major industries the programs on occupational safety and health are successful, are well advanced and have been developed to the point where the most important remaining problem is human failure. This problem is largely unsolved and is an area of increasing concern to physicians. While there are notable exceptions, the safety and health programs generally have not been so well developed in many of the small industries of this country in which most of the Nation's work force is employed. Certainly industry is concerned about the fatalities and disabling injuries and economic loss to the Nation. These problems are of daily concern to all members of the medical profession.

The provision of the Bill authorizes the Secretary of HEW to conduct programs to train personnel. There already is a great shortage of physicians, industrial engineers, safety engineers and other professional specialists in the field of occupational safety and health fields. This shortage will be intensified if this Bill is enacted.

In our own Charleston community we find that one of the corporations has just received a plaque for having attained five million man hours without a lost-time accident of a single day. There is no mention in this Bill about the problem of the employee who failed to use safety devices, who short circuits the safety devices, who refuses to wear safety shoes, who refuses to wear hard hats. The business community has as much interest in this area as does the Secretary of Labor. We feel and others feel in the field of occupational medicine that we can with deliberate speed but not with haste, come up with an answer to the problem that presents itself at this time.

I am in hopes that this little summary of this particular health act HR-14816 will be of benefit to those who are not initiated in occupational medicine but as physicians should object to the intrusion of the Government into our private sector.

Twenty five years ago only a few physicians were doing occupational medical work. Today there are over 25,000 including 5,000 full-time and the rest part-time on call. Almost all of these doctors are serving the larger establishments. As a rule the industrial physician is identified with industry production and usually functions on their premises. Such a physician is imbued with a philosophy of constructive medicine that is conversant with the philosophy of industry, production and manpower. He is versed in the peculiar administration requirements of his task, directs or understands industrial hygiene, maintains a preventive program and is competent in the allied matters of safety engineering, employment compensation and other forms of insurance. That which marks the industrial physician as such is that in addition to outstanding qualifications as a physician, he moves with facility among machines, material, manpower, products and process, and programmed group enterprises. Many medical societies and other industrial groups are engaged in programs to stimulate physicians to accept industrial practices and to acquaint small concerns with the advantages of in-plant medical services. We must not sit idly by while the man bores the hole under the seat, for we all may go down with the boat.



Dr. Harold E. Jervey Jr. of Columbia has been made a contributing editor of Medical Economics. **Dr. G. R. Dawson Jr.** and **Dr. R. E. Moore** of Florence have been presented certificates of appreciation from the Boys Club of Florence for their contributions, interest and support in the club. **Dr. James O. Morphis Jr.** of Hartsville was elected to Fellowship in the American Academy of Pediatrics at a recent meeting of the AAP Executive Board. **Dr. Hiram B. Curry** of Charleston and **Dr. Grady H. Hendrix** of Mount Pleasant have been elected to fellowships in the American College of Physicians. **Dr. David P. Reese** has moved his office to Greenville Medical Center at 24 Vardry St. **Dr. Frank Kinsey** has accepted a position as radiologist at the Byerly Hospital in Hartsville. He will receive his discharge from the Army August 31. He is a graduate of the Citadel and the Medical College of South Carolina. In memory of their late parents, Mr. and Mrs. Horace Daniel and Minnie Gerald Free, the Free family presented a portrait to the Bamberg County Medical Association of their family physician, **Dr. Henry Jefferson Stuckey.** The ceremony took place at Bamberg County Hospital. **Dr. Herbert A. Moskow** has assumed the practice of general medicine and surgery in Denmark. He was graduated from Erskine College and the Medical College of South Carolina. He has done internship in the Columbus Medical Center in Columbus, Ga. Dr. Moskow is a member of AMA and the S. C. Medical Assn. He and his wife are natives of Andrews.

Dr. A. R. Collins has been named Civitan of the Year in Myrtle Beach. **Dr. Henry Kuemmerer** has been awarded the "Distinguished Service Award" by the West-minister Jaycees. **Dr. Joseph Norman Walsh,** a man who had given 41 years of medical service to the people of Berkeley County was honored for his service to the community with the unveiling of his portrait in the Berkeley Hospital this spring. **Dr. Samuel Perry Davis** has assumed chairmanship of the Sumter County Board of Health from **Dr. William F. Young** whose board term expired June 30. Dr. Davis was graduated from the Medical College of South Carolina. Following his internship at Medical Center Hospitals in Charleston, he began general practice in July, 1959 in Pinewood.

Dr. Malcolm U. Dantzler, assistant state health officer, was chosen chairman of the Health Officers' Section of the Southern Branch of the American Public Health Association. **Dr. Hilla Sheriff** has been named one of 25 alternate delegates by the American Medical Women's Assn. to the Eleventh Congress of the Medical Women's International Association held in Vienna, Austria, June 23-29. **Dr. Sol Neidich** of Beaufort is being honored by B'nai B'rith for more than a generation of leadership in Jewish communal affairs. A Dr. Sol Neidich Youth Fellowship is being established in his name at the annual convention of B'nai B'rith District 5 in Hollywood, Florida.

Dr. Robert S. Matthews, chief resident in orthopedic surgery at Greenville General Hospital, addressed the June meeting of the Heberden Society of the National Institute of Rehabilitation of Switzerland.

The society, an international group of orthopedic surgeons, pathologists and rheumatologists, invited Dr. Matthews and **Dr. Donald E. McCollum** to discuss their recent findings concerning the relationship of gout and hyperuricemia. The find-

ings related to cases of aseptic necrosis of the femoral head, a hip disease, for which there were no discernible causes.

Dr. Loren F. Parmley Jr., formerly a physician of ex-president Dwight D. Eisenhower, has been named Director of Medical Education at Spartanburg General Hospital.

Parmley will divide his time as director of Medical Education with the South Carolina Medical College Hospital at Charleston, where he will be assistant dean and clinical professor of medicine.

Parmley has a distinguished career in the field of internal medicine and cardiovascular diseases, a career which has carried him to many sections of the world.

He comes to Spartanburg from a position as chief of the Department of Medicine at Walter Reed Hospital, where he was a noted cardiologist. Before joining the staff at Walter Reed, Parmley was medical consultant for the U. S. Army in Europe and has spent much time in Southeast Asia. In India he was a medical attache with the Diplomatic Corps.

Dr. Parmley is the author of 15 publications and is a diplomate of the American Board of Internal Medicine. He graduated from the University of Virginia in 1941 and received his M.D. degree from the University of Virginia School of Medicine in 1943.

MEETINGS

The Sixth National Cancer Conference will be held September 18-20 in Denver, Colorado.

The Medical Progress Assembly will be held September 22, 23, 24 in Birmingham, Alabama.

The Tennessee Valley Medical Assembly, Memorial Auditorium, Chattanooga, will be held September 13-14. For information write E. Wayne Gilley, M.D., chairman, 107 Interstate Building, Chattanooga, Tenn. 37402.

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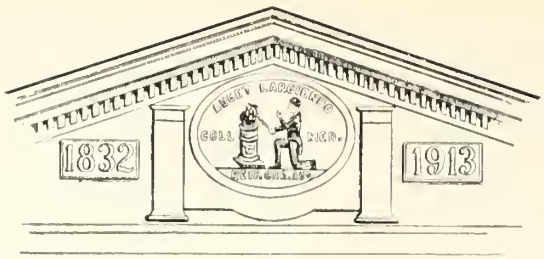
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Medical College of South Carolina

Dr. Dale Groom was a speaker on the program of the AMA Convention in San Francisco. He was one of two panelists on the symposium on Chest Pain.

Dr. Bart Antine, assistant professor of Ophthalmology, is acting as a visiting lecturer and consultant in Ophthalmology at the Medical College of Georgia.

Dr. William Lee and **Dr. Peter Hairston** presented papers at the meeting of the S. C. Surgical Society in Cashiers, N. C. **Drs. Hairston, Norman Cooper** and **Lee** produced an exhibit, "Dextran, Mechanism of Effect and Clinical Application" at the AMA meeting in San Francisco.

Dr. W. J. Dougherty recently lectured at Connecticut University, Hartford, on the subject of "Dialyzed Iron Staining of Acid Mucosubstance in Skeletal Muscle."

Dr. Hiram Curry lectured on "Anticoagulant Therapy in Cerebrovascular Disease" at the Neurologica Kliniken, Regionsjukhusic, Linkoping, Sweden, in May.

Dr. Grady Hendrix presented a paper on "Coronary Arteriography" at the annual meeting of the S. C. Heart Association in Hilton Head, in May.

MEDICAL COLLEGE OF SOUTH CAROLINA POSTGRADUATE SEMINAR ON INTERNAL MEDICINE

WEDNESDAY—OCTOBER 2, 1968

12:00 Registration

1:00 Iron Metabolism—Dr. Stuart Richardson, Absorption, transport and loss of iron and the synthesis of hemoglobin will be discussed so that the approach to anemias can be better understood.

1:45 Evaluation and Management of the Patient with Anemia.—Dr. Byrd Stuart Leavell, Professor of Medicine, University of Virginia, Charlottesville, Virginia.

3.00 *Disability Evaluation in Chronic Pulmonary Disease—Dr. Ross McLean, Professor of Medicine. (Section on Pulmonary Diseases), Emory University School of Medicine.

3:45 Questions & Answers.

4:00 Cardiology Seminar on Arrhythmias—Dr. Peter C. Gazes, Dr. Charles Summerall, Dr. Grady Hendrix. Tachycardias and heart block will be covered. Techniques for detection, the use of drugs and the newer pacing methods will be described.

5:15 Adjournment.

*Sponsored by the S. C. Tuberculosis Association.

THURSDAY—OCTOBER 3, 1968

8:30 Registration
SYMPOSIUM ON NEURODIAGNOSTIC PROCEDURES PRESENTED BY THE DEPT. OF NEUROLOGY.

9:00 Electromyography, Muscle Biopsy and Enzyme Studies in the evaluation of muscle weakness. Dr. Earl Godfrey

9:30 The Electroencephalogram, The ECHO—encephalogram and the Radioisotope Brain Scan in the study of Brain Disease.
Dr. Rhett Talbert
Dr. Neil Marshall

10:45 The Cerebral Circulation—Dr. Hiram Curry. Techniques for study will be demonstrated.

11:00 Panel Discussion: Selection of Stroke Patients for Intensive Diagnostic Study and Possibly for Surgery.
Dr. Rhett Talbert

11:45 Lunch

1:00 Cytogenetic Techniques in Diagnosis—Dr. Forde McIver, Department of Pathology. Use of chromosome studies in study of inherited diseases will be demonstrated.

1:45 Treatment in Chronic Pulmonary Emphysema —Dr. Robert Galphin

2:45 INH Prophylaxis against Tuberculosis. Dr. Eugene Smith

3:15 Panel Discussion on The Current Management of Asthma.
Dr. Kelly McKee
Dr. Charles H. Banov
Dr. John L. Buerrant (Professor of Medicine, University of Virginia School of Medicine, Charlottesville, Virginia)

SOUTH CAROLINA PEDIATRIC SOCIETY

The Adventure Inn, Hilton Head, S. C.

FRIDAY, SEPTEMBER 6, 1968

2:30 P.M. Meeting called to order

3:00 P.M. Funny Looking Kids—The New Syndromes
Sidney Briebart, M.D.

3:30 P.M. Investigation and Correction Pulmonary Disorders
H. Biemann Othersen, M.D.

4:15 P.M. "Keogh Plan for Physicians"
Lewis Kearns, LLB

5:30 P.M. Committee Meetings

7:00 P.M. Banquet

9:00 P.M. Dance

SATURDAY, SEPTEMBER 7, 1968

9:00 A.M. Endocrine Disorders of the Newborn
Sidney Briebart, M.D.

9:30 A.M. Correction of Endocrine Disfunction
H. Biemann Othersen, M.D.

10:15 A.M. Committee Activities of American Academy of Pediatrics and its Chapters
James B. Gillespie, M.D.

10:45 A.M. Investment for the Physician
Lewis Kearns, LLB

7:30 P.M. Steak Cookout

9:00 P.M. Dance

FROM THE HOSPITALS

First patients were admitted to a new eight-story addition to the South Carolina Baptist Hospital, Columbia, on June 7. The new wing has a 106-bed capacity and also includes a new labor and delivery suite and two intensive care units—one for coronary patients and one for medical-surgical patients.

The new 90-bed 363rd Tactical Hospital, Shaw Air Force Base, was officially opened May 26. The new hospital is one of few in the Air Force with no open wards. The two-patient semi-private room is the standard accommodation.

Anderson Memorial Hospital, Anderson, has awarded a contract for the construction of a new diagnostic and treatment wing and a five-floor shell, initially planned for the second phase of the hospital's expansion program, scheduled for 1972. The shell will be erected above the diagnostic and treatment wing. Hospital spokesmen say the shell will enable the hospital to increase bed capacity much more quickly when the need arises, will eliminate future disruption of service, and will result in considerable savings, since later addition would involve higher labor and materials cost and the expense of building new facilities over a completed unit.

Clarendon Memorial Hospital, Manning, has announced plans for an expansion program which will add 20 private rooms and other facilities. A local building fund drive was initiated by the hospital during National Hospital Week to help finance the construction.

Funds for Hospitals

The South Carolina Board of Health has announced that $5.4 million has been allocated the state in federal funds for building nursing homes, clinics and hospitals.

Dr. Kenneth Aycock, state health officer, said the state has received $77 million in similar federal funds during the past 19 years.

Half the total of the new allocation is for hospitals and public health centers. Almost $1.5 million is for nursing homes and chronic hospitals. The rest goes for modernizations of existing facilities, diagnostic or treatment centers, and rehabilitation facilities.

Aycock noted that while the state now has 9,839 hospital beds, it needs 3,844 more, and 2,616 need modernizing.



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THE AMA MEETING

At the American Medical Association's 117th Annual Convention in San Francisco, President Milford O. Rouse in his final report to the House of Delegates at the opening session urged physicians and their wives to become "active, participating citizens" in their communities, including the realm of political activity, and called for "enthusiastic support" of AMPAC to help move the federal government toward a "more moderate political philosophy."

Dwight L. Wilbur, the new president, said in his inaugural address that during the next 25 years, which will see greater change than ever before in medicine, the "ultimate force" that will determine the nation's social, economic and political course will be public opinion. "The key question," he added, then becomes, "Who and what will shape public opinion."

Among Dr. Wilbur's answers to some of the problems ahead were "participate actively in the legislative process, and in planning and administration of health laws and regulations" and to "demonstrate the effectiveness of the private system of medical care and of the voluntary health insurance mechanism."

The House of Delegates was in session for more than 13 hours and attended to 143 items of business.

Dr. Gerald D. Dorman of New York was named President-Elect by acclamation.

The House approved a resolution that "the bylaws of the AMA be amended to provide that in addition to receiving 'appeals filed by applicants who allege that they, because of color, creed, race, religion or ethnic origin, have been unfairly denied membership in a component and/or constituent association,' determining facts and reporting its findings to the House of Delegates, the Judicial Council shall, if it determines the allegations are indeed true, admonish, censure or, in the event of repeated violations, recommend to the House of Delegates that the state association involved be declared to be no longer a constituent association of the AMA."

A resolution was adopted that "the principle of graduated income tax credits for premiums paid for adequate health insurance" be adopted as approved policy of the AMA.

Another adopted resolution urged all state and local societies "to act swiftly and firmly in all instances of known exploitation and excessive charges for health care that may occur in their jurisdictions."

In the area of reducing costs to patients, the House adopted a resolution that "the AMA endorse the principle of voluntary health insurance coverage for outpatient x-ray and laboratory services acceptable to the hospital and its medical staff whereever performed prior to a scheduled hospital admission."

Three resolutions were introduced objecting to the government's support of group practice, particularly the prepayment type. They were combined into one substitute, "Resolved, that the AMA continue to espouse the private, fee-for-service practice of medicine; and be it further resolved that the AMA strongly disapproves of the provision of funds by the federal government for subsidizing any one form of organization of medical practice."

The House also resolved that "the Board . . . take appropriate action seeking the establishment of a separate Department of Health headed by a doctor of medicine."

With respect to relationships and negotiations between the AMA and the osteopaths, the House accepted for information a Board report which stated, "In the absence of cooperative leadership on the part of the practicing osteopaths and osteopathic educators, accomplishments by the AMA are rendered difficult. Such leadership was forthcoming in California, and is now needed elsewhere. When this osteopathic leadership is developed, the AMA stands ready to cooperate to its ut-

most."

The House also referred to the AMA's policy on chiropractic and urged state and local medical societies "to formally adopt the AMA Policy Statement on Chiropractic, or a somewhat similar expression" and "to alert the general public to the health hazard posed by the cult of chiropractic."

Program for Education in Coronary Disease

Plans are being made for pilot programs in certain South Carolina areas to screen and provide vital health eduction information for coronary prone persons.

Dr. Warren K. Giese, head of the Department of Health and Physical Education at the University of South Carolina, will use a $2,700 grant from the S. C. Regional Medical Program to plan the project.

The aim is to educate coronary prone persons in ways to decrease their chances of coronary attacks. South Carolina leads the nation in per capita cardiovascular deaths, and more than half of all deaths in the United States are from cardiovascular troubles.

Dr. Jeremiah Stamler, a Chicago cardiologist and Dr. Richard Shekelle of the University of Illinois Medical School will be among the consultants for the program. Columbia consultants include Dr. Hugh H. Dubose, Dr. Dana C. Mitchell Jr. and Dr. Donald E. Saunders Jr.

Dr. Giese said this project would lay plans for an intensive education program later for persons whose tests show are more prone to coronary attacks than the average.

MEETING

The 28th Congress on Occupational Health will be held September 30-October 1 at the Waldorf-Astoria Hotel in New York City.

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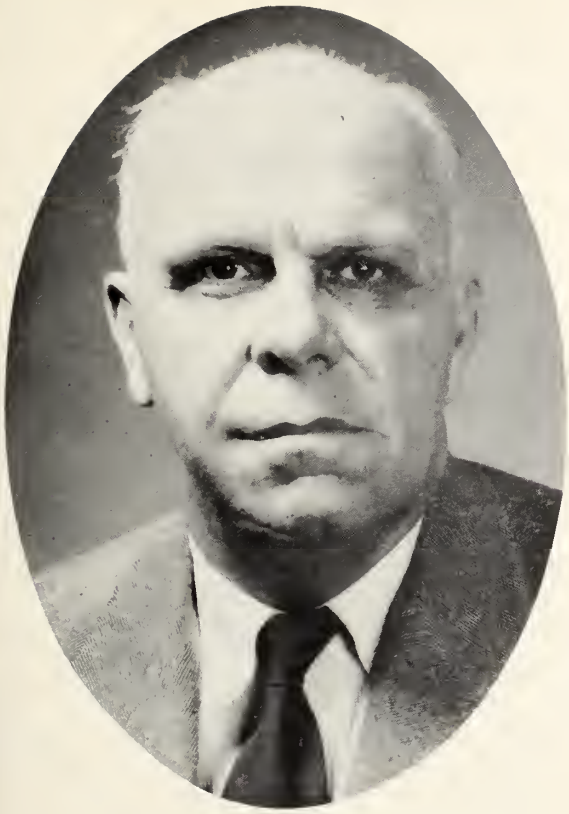
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Dr. Olin B. Chamberlain

Olin B. Chamberlain, president of this South Carolina Medical Association in 1947, died on June 30 after a long hospital stay. Dr. Chamberlain had been retired and had suffered varying degrees of ill health since 1952.

He was a graduate of the College of Charleston and the Medical College of South Carolina (1918). After hospital experience in Philadelphia and at Roper Hospital he entered private practice, later confining himself to internal medicine and finally to nervous and mental diseases. He became a professor at the College of Charleston and eventually professor of neuropsychiatry at the Medical College.

Dr. Chamberlain did post graduate work abroad and spent two years in the Army, being separated as a colonel. He was a member of many medical organizations and served as a visiting physician at Roper Hospital. In 1962 a portrait was unveiled in the psychiatric department of the Medical College.

Olin Chamberlain was a man of extraordinary intelligence and ability. He combined a keen mind with a lively sense of humor and an affable personality. As he became involved in the newer developments in psychiatry he kept his feet firmly on the ground, giving much sound help to his many appreciative patients. His friends were many and intimate and shared with him the enjoyment of a life full of pleasant amenities as well as more serious concerns. He was a man of the outdoors, a welcomed member in any group, social or literary, and a true student of his profession.

Dr. Lang Weathersbee Anderson

Dr. Lang Weathersbee Anderson, 79, of Williston died in June while attending his 50th medical school class reunion. He was born in 1888 at Donora, Barnwell County.

He worked his way through college, and was graduated from the University of Maryland Medical School in 1918, after which he served with the U. S. Navy during World War I as a medical officer. From 1921 until 1926, he practiced general medicine in Barnwell county, following which he specialized in neurology at New York University. In 1928, he moved to Wilmington, Del., where he was a neurologist until his retirement in 1952.

During the period 1928 to 1952, Dr. Anderson acted as chief of neurology, Wilmington General Hospital; chief of neurology, Veterans Hospital in Wilmington; consultant for Veterans Administration association. He also was a member of the staff at St. Francis Hospital, and Elkton Hospital at Elkton, Md.

Dr. Anderson wrote several tracts in his field, which were presented to medical associations throughout the U. S. In 1954, his home in Williston was destroyed, and

with it, his medical records, research work and films.

He was, in the 1940s, vice president of Newcastle County Medical Society of Delaware; and in the 1950s president of Barnwell County Medical Society. After retirement in 1952, he was active in beef cattle and grain production in Barnwell county.

Dr. Louis Birch

Dr. Louis Birch, 62, retired chief of The Medical Service of the Veterans Administration Hospital, Columbia, died June 11.

Dr. Birch was born in Warsaw, Poland, son of the late Dr. Samuel and Ida Lipschutz Birch. He was a graduate of the University of Pennsylvania, Phi Beta Kappa, and a graduate of University of Pa. Medical School, class of 1932. He interned at Einstein Hospital, Northern Division. Dr. Birch did private practice in Philadelphia, and later served with the Department of Interior, Bureau of Indian Affairs in Montana in 1936-1937. During World War II, he served as a surgeon with the 8th Armored Division.

Dr. Birch had been associated with the Veterans Administration Hospital for 29 years; his late assignments were Cardiologist and Chief of the Medical Service before he retired in 1966. He was a diplomate of the American Board of Internal Medicine.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

HYDREA

Cancer Chemotherapy. Rx

Manufacturer: E. R. Squibb & Sons

Nonproprietary Name: Hydroxyurea

Indications: Melanoma and resistant chronic myelocytic leukemia.

Contraindications: Marked bone marrow depression; women of childbearing age.

Dosage: Intermittent therapy: 80 mg/Kg., orally as single dose, every third day. Continuous therapy: 20-30 mg/Kg., orally as single dose, every day. Dosage based on patient's actual or ideal weight, whichever is less.

Supplied: Capsules—500 mg, bottles of 100.

DUPLICATE SINGLE PRODUCTS

LUBRICORT

Corticoid—Local. Rx

Manufacturer: Texas Pharmacal Co.

Nonproprietary Name: Hydrocortisone

Indications: Pruritic dermatoses accompanying physiologic dry skin conditions, and corticosteroid responsive dermatoses.

Contraindications: Tuberculous, fungal, and most active viral diseases of the skin. Not for cutaneous manifestations of such diseases as pemphigus or lupus erythematosus. Not for ophthalmic use.

Dosage: Apply topically 3 or 4 times daily.

Supplied: Cream—⅛%, 1/4%, ½%, and 1%, tubes or jars of ½ to 4 oz. Lotion—same strength as cream, bottles of 2 to 8 oz.

MANNITOL I. V.

Diuretic—Other. Rx

Manufacturer: Abbott Laboratories

Nonproprietary Name: Mannitol

Indications: Oliguric phase of acute renal failure, pre- and post-operative reduction of intracular ml. 15%, bottles of 500 ml.

as an adjunct to eye surgery in non-glaucomatous patients.

Contraindications: Advanced renal failure, severe congestive heart failure and pulmonary edema, metabolic edema associated with increased capillary fragility or membrane permeability, patients with head injury where possibility of intracranial bleeding exists.

Dosage: Adults—50 to 200 Gm/24 hrs., i.v.

Supplied: Solution—5% and 10%, bottles of 1,000 ml. 15%, bottles of 500 ml.

COMNAFAC

Hypnotic—Non-barbiturate. Rx

Manufacturer: Smith, Miller & Patch, Inc.

Nonproprietary Name: Methaqualone HCl

Indications: Insomnia

Contraindications: Pregnancy, in conjunction with psychotropic drugs or other central nervous system

depressants, in children under 14 yrs. of age.

Dosage: One or two capsules 15-30 minutes before retiring.

Supplied: Capsules—200 mg, bottles of 100.

TYPHOID VACCINE

Biological. Rx

Manufacturer: Wyeth Laboratories

Nonproprietary Name: Salmonella typhi organisms, killed

Indications: Active immunization against typhoid fever.

Contraindications: None mentioned.

Dosage: Primary immunization: Adults and children over 10 yrs.—two doses of 0.5 ml each, s.c., at interval of 4 or more weeks. Children 6 mos. to 10 yrs.—two doses of 0.25 ml each, s.c., at interval of 4 or more weeks.

Booster doses: Single doses in same range as above.

Supplied: Vials—5, 10, and 20 ml. (1 billion organisms/ml)

COMBINATION PRODUCTS

AMCORT CREAM

Antibiotics—Topical. Rx

Manufacturer: Texas Pharmacal Co.

Composition: Each gram contains: Amphomycin calcium 5 mg base; Neomycin sulfate 3.3 mg base; Hydrocortisone acetate 10 mg

Indications: Primary and secondary cutaneous infections caused by organisms susceptible to amphomycin or neomycin.

Contraindications: Cutaneous manifestations of pemphigus or lupus erythematosus, tuberculosis of the skin, cutaneous infections of viral origin, fungal lesions, hypersensitivity to any of the components.

Dosage: Apply topically three times daily.

Supplied: Tubes—15 grams.

COLREX DECONGESTANT

Prep. Rx

Manufacturer: Rowell Laboratories

Composition: Chlorpheniramine maleate 4 mg; Tripelennamine HCl 50 mg; Phenylpropanolamine HCl 25 mg; Phenylephrine HCl 10 mg

Indications: Symptoms of allergic rhinitis, sinusitis, hay fever, and colds.

Contraindications: Not for children under 6 yrs.

Dosage: Adults and children over 12 yrs.—one tab. 3-4 times daily. Children 6 to 12 yrs.—½ tab. 3-4 times daily.

Supplied: Tablets—bottles of 100, 1,000, and 5,000.

COLREX EXPECTORANT

Cough Prep. O-t-c

Manufacturer: Rowell Laboratories

Composition: Each 5 ml contains: Glyceryl guaiacolate 100 mg; Ammonium chloride 100 mg

Indications: Bronchitis, asthma, bronchiectasis, colds.

Contraindications: None mentioned.

Dosage: Adults and children over 12 yrs.—two tsp. q4h. Children 6 to 12 yrs.—one tsp. q4h. Children 1 to 6 yrs.—½ tsp. q4h.

Supplied: Syrup, sugar-free—bottles of 4 and 16 oz.

FERO-FOLIC-500

Hematinic. Rx

Manufacturer: Abbott Laboratories

Composition: Ferrous Sulfate 525 mg; Folic Acid 350 mcg; Ascorbic Acid 500 mg

Indications: Prevention and treatment of iron and folate deficiency anemias in pregnancy.

Contraindications: None mentioned.

Dosage: One tablet daily.

Supplied: Filmtabs—bottles of 100, 500 and 5,000.

INFLUENZA VIRUS VACCINE, Bivalent

Biological. Rx

Manufacturer: Lederle Laboratories

Composition: Each ml contains: A^2 (Japan 170/62) 150 CCA units; A^2 (Taiwan 1/64) 150 CCA units; B_2 (Massachusetts 3/66) 300 CCA units

Indications: Immunization against influenza virus.

Contraindications: Hypersensitivity to eggs or egg products.

Dosage: Primary immunization: Adults—two doses of 1 ml each, s.c., at two mos. interval. Children 3 mos. to 5 yrs.—three doses of 0.1-0.2 ml, s.c., at intervals of 1-2 wks. and 8 wks. respectively. Children 6 to 10 yrs.—two doses of 0.5 ml each, s.c., at two months interval.

Booster doses: Single doses in same range as above.

Supplied: Vials—10 ml

NASOCON

Nasal decongestant. o-t-c

Manufacturer: Smith, Miller & Patch, Inc.

Composition: Antazoline phosphate 0.5%; Naphazoline HCl 0.25%; Sodium chloride 0.8%

Indications: Nasal congestion due to common cold, sinusitis, hay fever.

Contraindications: None mentioned.

Dosage: Two sprays in each nostril q6-8h. For pediatric use only under direction of physician.

Supplied: Plastic squeeze bottle w. spray tip—15 ml

SIDONNA

Antispasmodic. Rx

Manufacturer: Reed & Carnrick

Composition: Simethicone 25 mg; Hyoscyamine sulfate 0.1037 mg; Atropine sulfate 0.0194 mg; Hyoscine HBr 0.0065 mg; Butabarbital sodium 16 mg

Indications: Relief of gas, spasm, and pain in the gastro-intestinal tract.

Contraindications: Glaucoma, cardiac disease, prostatic hypertrophy, pyloric obstruction, sensitivity to any of the ingredients.

Dosage: One or two tablets, preferably before meals and at bedtime.

Supplied: Tablets—bottles of 100. .

NEW DOSAGE FORMS

FER-IN-SOL Capsules

Hematinic o-t-c

Manufacturer: Mead Johnson Laboratories

Nonproprietary Name: Ferrous sulfate
Indications: Iron deficiency anemia.
Contraindications: None mentioned.
Dosage: As indicated.
Supplied: Capsules, liquid-filled—60 mg iron, bottles of 100.

FER-IN-SOL Syrup
Hematinic o-t-c
Manufacturer: Mead Johnson Laboratories
Nonproprietary Name: Ferrous sulfate
Indications: Iron deficiency anemia
Contraindications: None mentioned.
Dosage: As indicated.
Supplied: Syrup—30 mg iron/5 ml, bottles of 16 fl. oz.

PALADAC Chewable Tablets
Vitamins Combination o-t-c
Manufacturer: Parke, Davis & Co.
Composition: Ten vitamins
Indications: Dietary supplement
Contraindications: None mentioned
Dosage: One tablet daily
Supplied: Tablets—bottles of 30 and 100.

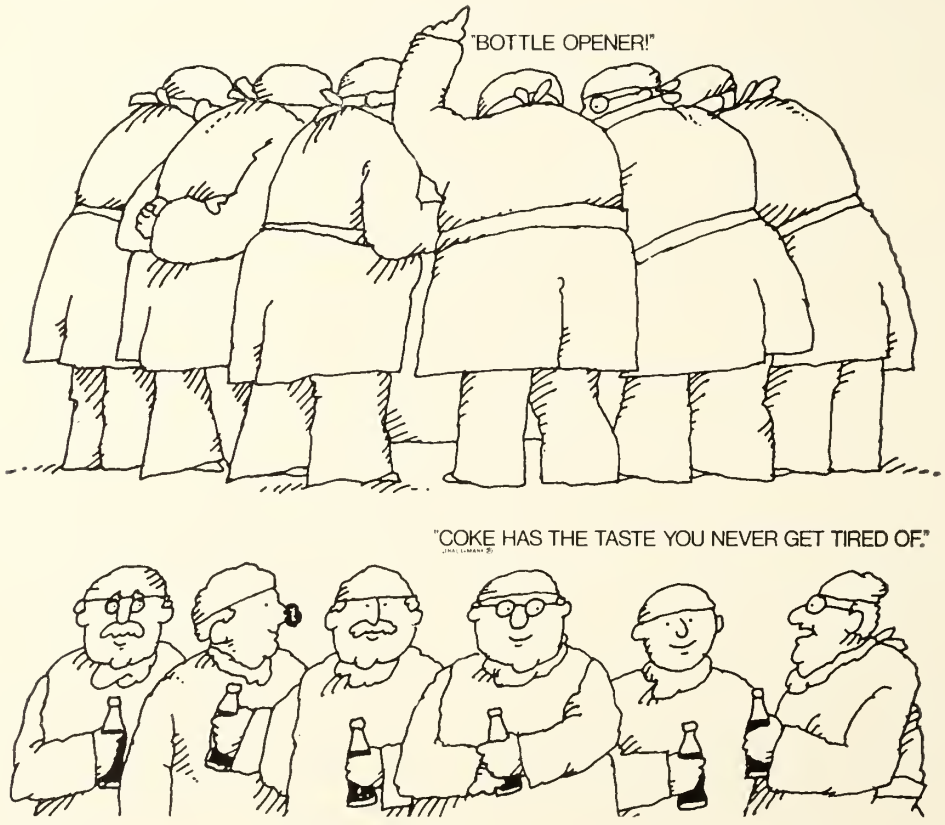
MEETINGS

The Eighth Charlotte Postgraduate Seminar is scheduled for October 2-3. The seminar will be held at the Presbyterian Hospital in Charlotte.

The Tenth International Congress on Diseases of the Chest sponsored by the Council on International Affairs of the American College of Chest Physicians will be held at the Washington Hilton Hotel, Washington, D. C., October 4-8.

For further information write: the American College of Chest Physicians, 112 East Chestnut Street, Chicago, Ill. 60610.

The Second National Congress on Medical Ethics will be held in Chicago at the Drake Hotel on October 5-6. This year's program will be a practical consideration and application of ethical principles in everyday practice. It will run the gamut of questions from relationships with ancillary personnel to the ethics of transplanting hearts and lungs. Distinguished speakers from all over the country have agreed to participate in the program.



"COCA-COLA" AND "COKE" ARE REGISTERED TRADE MARKS WHICH IDENTIFY ONLY THE PRODUCT OF THE COCA-COLA COMPANY



Let's be specific about Campbell's Soups... and *reducing diets*



There are more than 30 million people in America who are overweight. During the next year, you probably will see more than 1,000 of them in your own practice.

One good way to help these patients is to give them a reducing diet based on ordinary eating patterns.

Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



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Ovulen-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

works the way a woman thinks

by weekdays...not "cycle days"

Whether it be "shopping day," "bridge day" or "housecleaning day," a woman is accustomed to thinking in terms of days of the week rather than in "cycle days." Ovulen-21 lets her remember her natural way. Once established, her starting day is always the same day of the week... because it is fixed at three weeks on — one week off and is independent of withdrawal flow.

The same Ovulen in the same low dosage... with the same low incidence of side effects and the same high degree of protection against pregnancy.

Note: Ovulen remains available in the familiar round Compack for those women who may wish to continue to use the traditional 20-day schedule. Be sure to specify Ovulen-21 to assure each new patient of the advantages of the new *Three Weeks On—One Week Off* schedule. She might appreciate your budget-minded authorization for a six-month supply (five Refills).

Indication — For oral contraception.

Contraindications — Thrombophlebitis or a history of thrombophlebitis or pulmonary embolism, liver dysfunction or disease, known or suspected carcinoma of the breasts or genital organs and undiagnosed vaginal bleeding.

Warnings — Discontinue medication pending examination if sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine occurs. Discontinue if papilledema or retinal vascular lesions occur. Since the safety of Ovulen in pregnancy has not been established, rule out pregnancy before a patient who has missed two consecutive menstrual periods continues the tablets. Consider the possibility of pregnancy at the first missed withdrawal flow if the recommended schedule has not been followed. The active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this to the infant has not been determined.

Precautions — The pretreatment physical examination should specifically include the breasts, pelvic organs and a Papanicolaou smear. Endocrine and possibly liver function tests may be affected by Ovulen. Such tests should be repeated two months after stopping the medication if their results were abnormal in a woman taking Ovulen. Pre-existing fibroids may enlarge under the influence of progestin-estrogen preparations. Patients with epilepsy, migraine, asthma, cardiac or renal dysfunction, which conditions might be influenced, require careful observation because Ovulen may cause some degree of fluid retention.

Ovulen should be used with caution in patients with a history of cerebrovascular accident. Nonfunctional causes should be considered if breakthrough bleeding occurs. Adequate diagnostic measures are indicated in women with undiagnosed vaginal bleeding. Carefully observe patients with a history of psychic depression and discontinue the medication if depression recurs to a serious degree. Any possible influence of prolonged Ovulen use on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. Carefully observe diabetic patients during Ovulen use since a decrease in glucose tolerance has occurred in a few such patients. Physicians should be alert to the earliest manifestations of thrombophlebitis and pulmonary embolism since such conditions occasionally occur in patients taking oral contraceptives. Use Ovulen judiciously in young patients in whom bone growth is not complete because of the effects of estrogens on epiphyseal closure. Age is no absolute limiting factor, although Ovulen use may mask the onset of the climacteric. Pathologists should be informed of Ovulen use when relevant specimens are submitted.

Side effects — The following adverse reactions have been observed in varying incidence in patients taking oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight (increase or decrease), changes in cervical erosions and secretions, suppression of lactation when used immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals and mental depression.

Although the following side effects have been reported in users of oral contraceptives no cause and effect relationship has been established: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption and itching. Thrombophlebitis, pulmonary embolism and neuro-ocular lesions have occurred in users of oral contraceptives, although a cause and effect relationship has been neither established nor disproved.

The following laboratory results may be altered by oral contraceptives: Bromsulphalein® and other hepatic function tests—increased; coagulation tests, including prothrombin, Factors VII, VIII, IX and X — increased; thyroid function — increase in protein-bound iodine and butanol extractable protein-bound iodine, and a decrease in T^3 values; metyrapone test and pregnanediol determinations.

Dosage and administration — One tablet of Ovulen-21 daily for 21 consecutive days, beginning five days after the onset of a menstrual flow (the first day of menstruation is counted as day 1), then discontinued for one week. If Ovulen is started later than day 5 after menses begins another method of protection is used until the first seven tablets have been taken. Subsequent 21-day courses are begun on the eighth day after the last tablet was taken in the preceding cycle. This three weeks on — one week off schedule is continued whether or not withdrawal flow has begun, flow has ceased or spotting or breakthrough bleeding has been experienced.

If one tablet is missed it is to be taken as soon as it is remembered and the next tablet at the usual time. If two consecutive tablets are missed the dosage is doubled for the next two days, then the regular schedule is resumed. If three consecutive tablets are missed a new tablet cycle is started on the eighth day after the last tablet was taken. For the best protection in the latter two instances instruct the patient to use another method of contraception until the next seven consecutive tablets have been taken. The possibility of ovulation increases with each successive tablet missed.

Postpartum administration — Non-nursing mothers may begin Ovulen immediately after delivery and nursing mothers after lactation is well established.

SEARLE *Before prescribing see Detailed Product Information.*
G.D. Searle & Co., P.O. Box 5110, Chicago, Illinois 60680

Ovulen-21®
Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

three weeks on...one week off

In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticaria type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significan disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl)
25 mg. t.i.d.

for moderate to severe anxiet and mixed anxiety-depressio

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J.



in the bronchitis–emphysema syndrome ...bronchodilation without pressor effects

Most bronchodilators for use in pulmonary emphysema contain ephedrine-like drugs. ELIXOPHYLLIN® never did. So, ELIXOPHYLLIN will not cause tachycardia, palpitations, nervousness, insomnia, or other undesirable side effects of ephedrine-like products. Even patients with hypertension, cardiac insufficiency, hyperthyroidism, prostate hypertrophy and glaucoma can take ELIXOPHYLLIN.

Other advantages of ELIXOPHYLLIN: rapid and sustained bronchodilation • proven increase in pulmonary function • adrenergic abuse eliminated.

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Adult maintenance dosage in bronchitis and pulmonary emphysema: one ounce (30 ml.) t.i.d. on arising, at 3 P.M., and on retiring. Adjust dosage to patient response. This average dosage provides continuous bronchodilation. Do not administer other xanthine preparations concurrently. May be contraindicated in peptic ulcer.

ELIXOPHYLLIN®

Each 15 ml. contains theophylline (anhydrous) 80 mg.; alcohol 20%

SHERMAN
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Detroit, Michigan 48211



Tandearil® in Osteoarthritis
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently
Warning: Tandearil is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.
Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black c tarry stools or other evidence of intestin hemorrhage occur. Make complete bloc counts at weekly intervals during early t apy and at 2-week intervals thereafter. D continue the drug immediately and insti countermeasures if the white count cha significantly, granulocytes decrease, or mature forms appear. Use greater care i elderly and in hypertensives.
Adverse Reactions: The more common nausea and edema. Swelling of the ank face may be minimized by withholding c salt, reduction in dosage or use of diure In elderly patients and in those with hyp tension, the drug should be discontinue the appearance of edema. The drug has associated with peptic ulcer and may r

'Pain Break" for an osteoarthritic.

Tandearil can usually ease it.

At 46, her knees still look good on the outside. But inside, there may be the familiar picture of osteoarthritis.



If aspirin doesn't help, Tandearil often will. Pain and stiffness begin to ease up in 3 or 4 days. You can often maintain response with a daily dose of only 1 or 2 tablets.

Of course, Tandearil is not for every osteoarthritic. Select your patients carefully and follow them in line with the Contraindications, Precautions, Warning, and Adverse Reactions listed below.

But for many aspirin-stubborn osteoarthritics, let Tandearil ease the unwelcome pain breaks of osteoarthritis.

Tandearil®
oxyphenbutazone

ve a latent peptic ulcer. The patient should t instructed to take doses immediately after als or with milk to minimize gastric upset. ug rash occasionally occurs. If it does, mptly discontinue the drug. Agranulocy- is, exfoliative dermatitis, Stevens-Johnson ndrome, Lyell's syndrome (toxic necrotiz- epidermolysis) or a generalized allergic action similar to a serum sickness syn- me may occur and require permanent hdrawal of medication. Agranulocytosis n occur suddenly in spite of regular, re- ated normal white counts. Stomatitis, sali- ry gland enlargement, vomiting, vertigo and nguor may occur. Leukemia and leukemoid actions have been reported. While not defi- ely attributable to the drug, a causal rela- nship cannot be excluded. Thrombocyto- penic purpura and aplastic anemia may occur. Confusional states, agitation, head- ache, blurred vision, optic neuritis and tran- sient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hyper- sensitivity, angiitis, pericarditis and several cases of anuria and hematuria. With long- term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

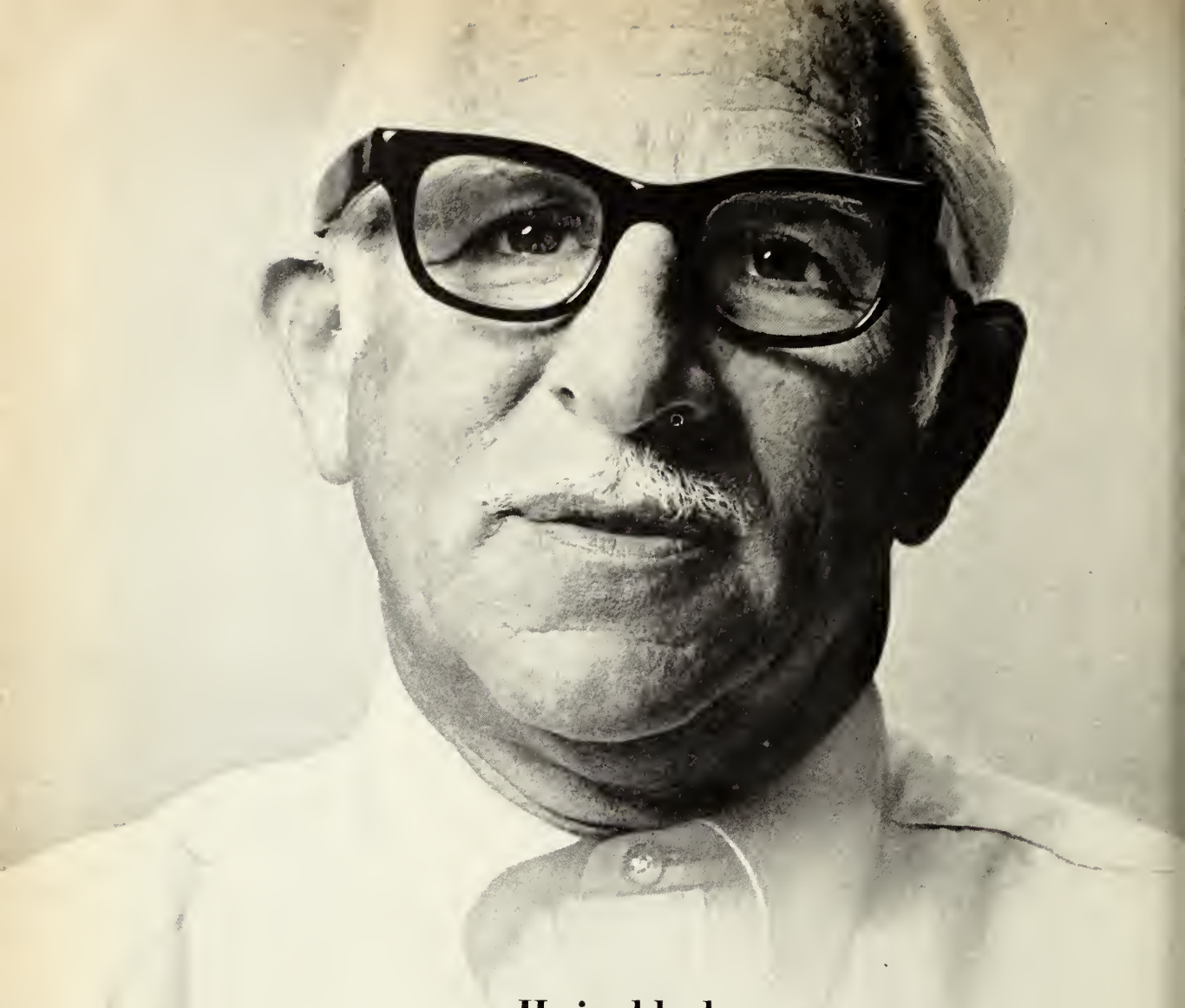
For complete details, please see full Prescribing Information.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily. In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and other factors influencing drug response. Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

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Geigy

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502



He is elderly, he is on corticosteroids, when he needs an antibiotic he may be a candidate for

DECLOSTATIN® 300

Demethylchlortetracycline HCl 300 mg and Nystatin 500,000 units CAPSULE-SHAPED TABLETS Lederle

b.i.d.

To guard susceptible patients against intestinal monilial overgrowth during broad-spectrum therapy—the protection of nystatin is combined with demethylchlortetracycline in DECLOSTATIN.

For your susceptible candidates, prescribe DECLOSTATIN—the broad-spectrum therapy that prevents monilial overgrowth.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appr measures should be taken.

In infants, increased intracranial pressure with bulging fontar been observed. All signs and symptoms have disappeared rapidl cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomitin rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—mac ular and erythematous rashes; a rare case of exfoliative derma been reported. Photosensitivity; onycholysis and discoloration nails (rare). Kidney—rise in BUN, apparently dose related. Ti increase in urinary output, sometimes accompanied by thirst Hypersensitivity reactions—urticaria, angioneurotic edema, anap Teeth—dental staining (yellow-brown) in children of mothers gi drug during the latter half of pregnancy, and in children given t during the neonatal period, infancy and early childhood. Enam plasia has been seen in a few children. If adverse reaction or crasy occurs, discontinue medication and institute appropriate

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Sh given 1 hour before or 2 hours after meals, since absorption is i by the concomitant administration of high calcium content drug and some dairy products. Treatment of streptococcal infection continue for 10 days, even though symptoms have subsided.

LEDERLE LABORATORIES, A Division of American Cyanamid C Pearl River, New York

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

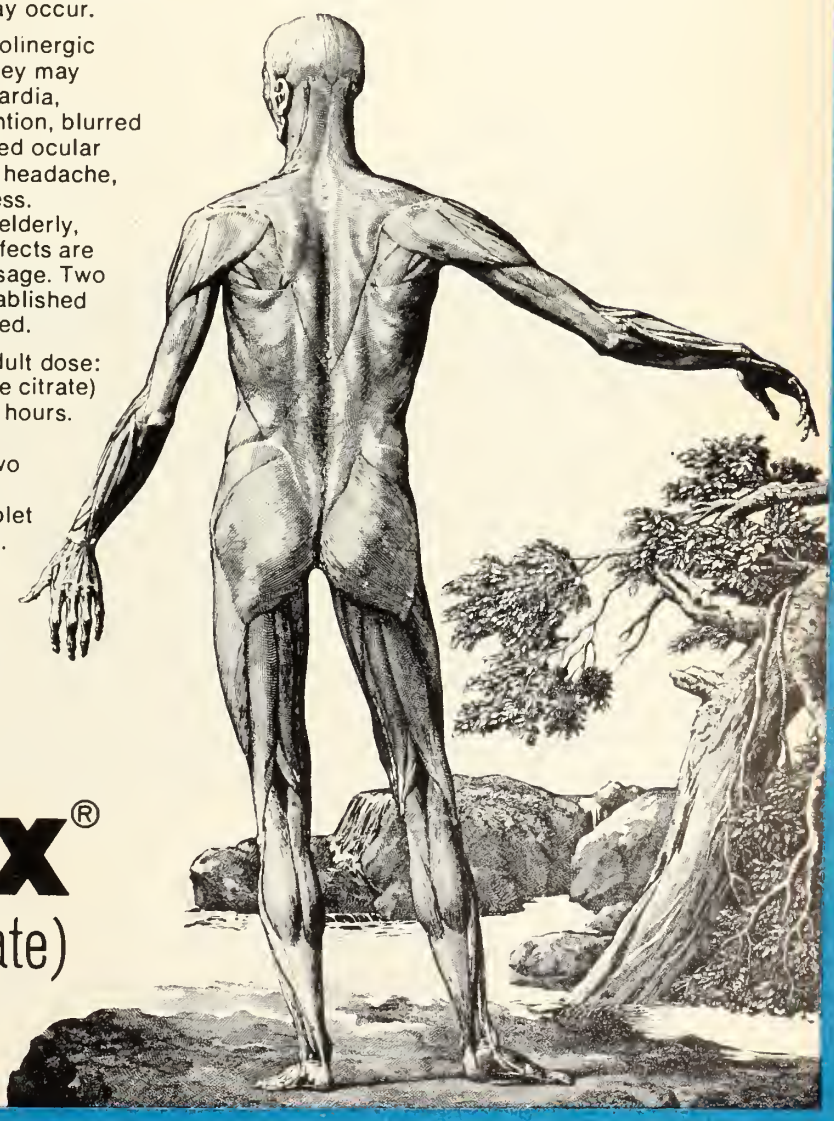
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
Northridge, California 91324



Norflex®
(orphenadrine citrate)

Q. How much does the **anticostive* hematinic** cost?

A. No more than costive hematinics cost!

The anticostive hematinic is
PERITINIC®
Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:

● Elemental Iron (as Ferrous Fumarate)	100 mg
● Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

Bottles of 60

* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic?

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Make tuberculin testing routine with every physical examination.



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Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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For Iron Deficiency Anemia

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brand of FERROUS GLUCONATE

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90 Park Avenue, New York, N.Y. 10016



MORNING STIFFNESS EASED LAST NIGHT

(She took Persistin® instead of aspirin)

Persistin treats morning stiffness and pain the night before.

Persistin is a unique salicylate which combines the prompt analgesic action of aspirin to encourage early sleep with the proven, persistent action of salicylsalicylic acid to permit uninterrupted sleep. Three Persistin tablets at bedtime yield therapeutic serum salicylate levels on arising which are well within the range of effective salicylate therapy for the relief of pain and stiffness in arthritis.

Thus, therapy with Persistin allows many arthritics to dress more quickly and easily, and face the morning optimistically.

Persistin is also valuable for *day-long control* of the pain and discomfort of arthritis.

DOSAGE: *To relieve morning stiffness and pain:* when salicylates have not been taken during the day, an adult dose of three tablets at bedtime is suggested.

For 24-hour control of pain: Adults up to 160 lbs., one tablet after each meal and one at bedtime. Adults over 160 lbs., one tablet after each meal and two at bedtime.

PRECAUTION: Other salicylates should not be taken concurrently. Do not exceed recommended doses.

PERSISTIN®
salicylsalicylic acid 7½ gr. (485 mg.)—aspirin 2½ gr. (160 mg.)

SHERMAN
LABORATORIES, INC.
Detroit, Michigan 48211

When the problem is only skin deep

USE 'POLYSPORIN'® brand POLYMYXIN B-BACITRACIN OINTMENT

for topical antibiotic therapy with minimum risk of sensitization



Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in ½ oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

From the First Family of Tetracycline– One of the 31 useful dosage forms in the ACHRO Family

ACHROSTATIN® V Capsules

Tetracycline HCl 250 mg /Nystatin 250,000 units



The lowest priced tetracycline-nystatin combination

Lederle

329-B/6094

Open-eyed nights





Too tense to sleep...too tired to get up. Early to bed, late to rise, and not much sleep at that, the patient with severe psychic tension is understandably tired. His tensions and overreactions to the day's stresses may interfere with proper sleep, and his inability to face the day's activities can produce an ever-worsening pattern.

By relieving psychic tension, Valium® (diazepam) facilitates sleep, particularly with an h.s. dose. In many patients, the usefulness of Valium has been demonstrated in relieving psychic tension alone or with secondary depressive symptoms. Valium is generally well tolerated and, with proper maintenance dosage, usually does not unduly impair mental acuity or ability.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders; athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep addiction-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, lactation or in women of childbearing age requires that potential benefit be weighed against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Employ usual precautions in the severely depressed or in those with latent depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50, 100 and 500.

ROCHE

Roche® LABORATORIES

Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Valium® (diazepam)

useful for the relief of psychic tension, alone or with associated depressive symptoms

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SHELVES

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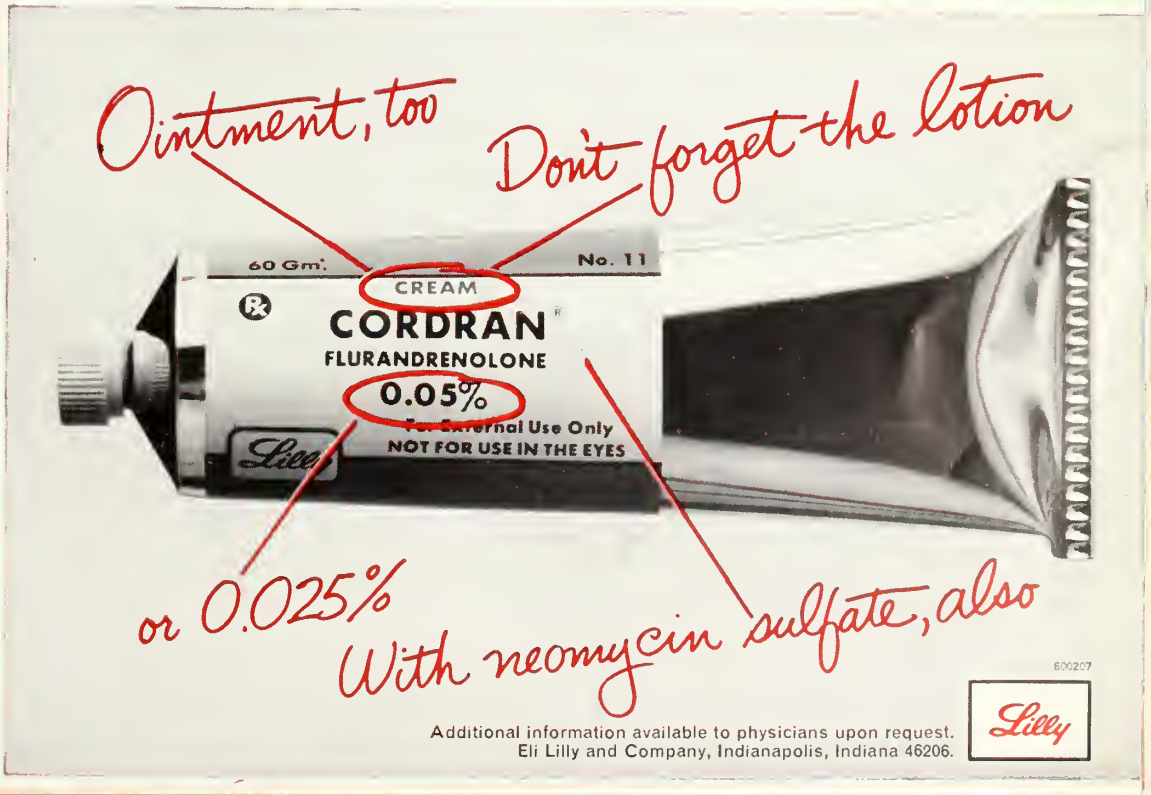
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X-RAY FILM OF THE MONTH

ENDOCARDIAL FIBROELASTOSIS IN S. C.

MINUTES OF ANNUAL MEETING
(Conclusion)

IE 64 SEPTEMBER, 1968 NUMBER 9



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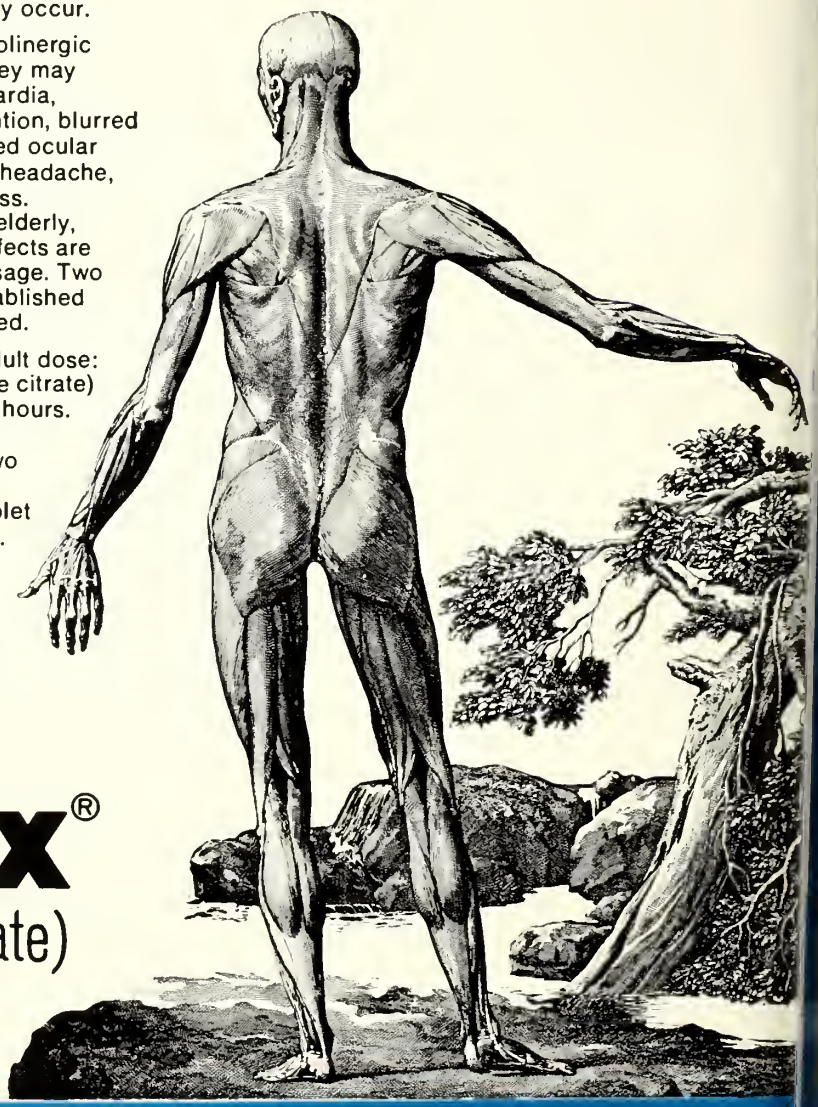
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

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SEPTEMBER, 1968—VOL. 64 NO. 9

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The views expressed in this publication are those of the writers and do not necessarily reflect the opinions of the South Carolina Medical Association.

Contributions of Original Articles

Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

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References—Should conform to the following order: surname and initials of author, title of article in small letters, name of periodical, with volume, page, month, day of the month if weekly, and year—e.g.: Lee, G. S.: The heart rhythm following therapy with digitalis, Arch Int Med 41:554, Dec. 1942. They should be listed numerically in order of appearance in the text. Standard abbreviation for journals should be used. Note that periods are not used with these abbreviations as indicated by the Index Medicus. Other abbreviations should also be standard— e.g. mg, ml, Gm.

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1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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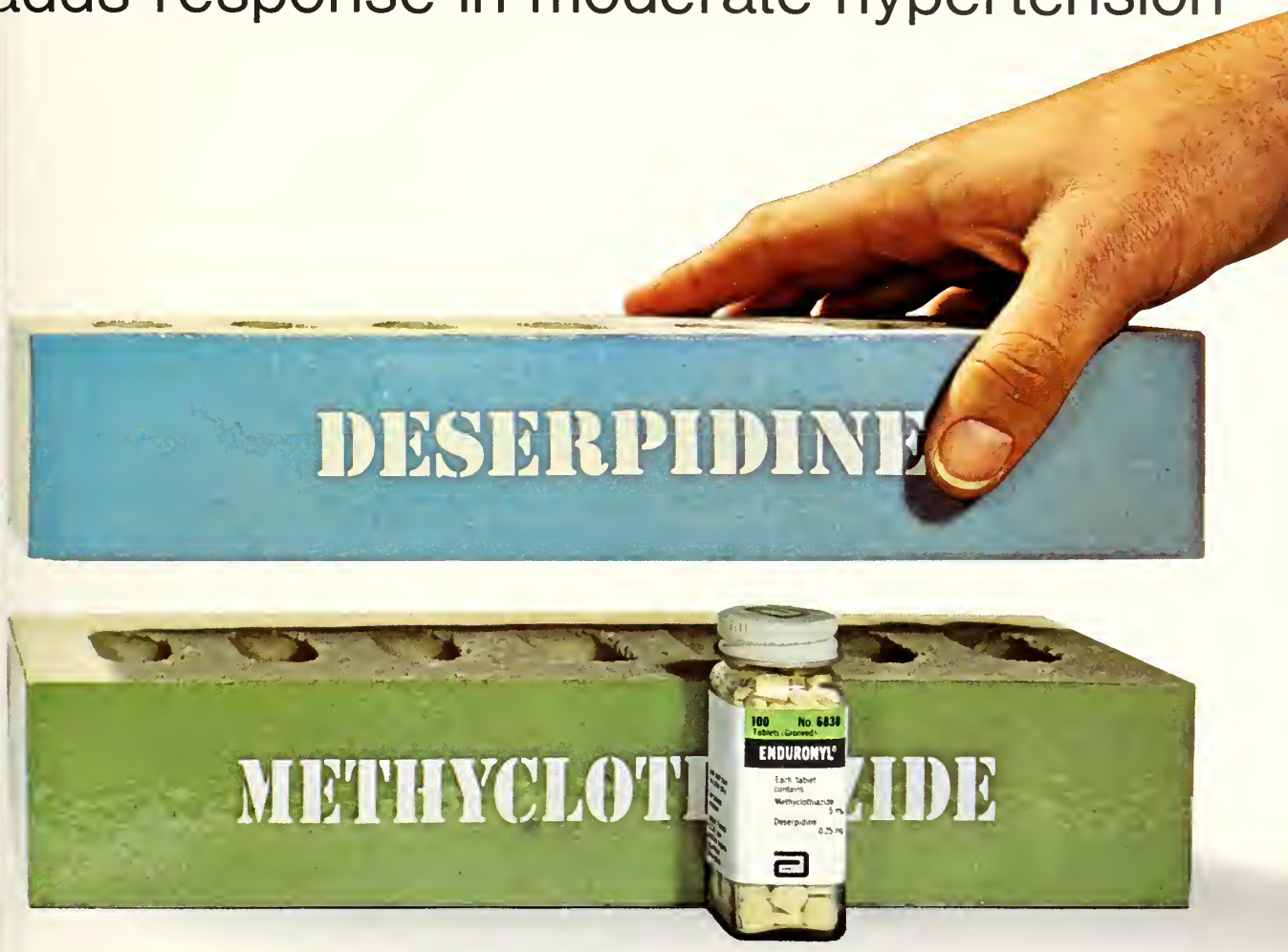
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MILD TO MODERATE TO SEVE



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METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

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Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage; caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions—Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804439R

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Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

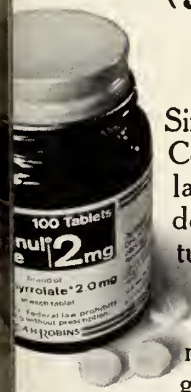
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

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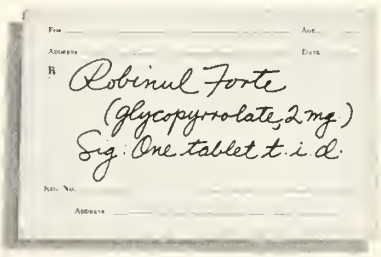
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ever, we believe you'll agree there's always for a better anticholinergic. This is why we're g you to give Robinul Forte a fair trial. Robinul e exerts a highly specific antisecretory action and ed inhibitory effect on intestinal tone. We're con- d you'll agree that this is indeed an outstanding when you observe its outstanding suppression of symptoms. Furthermore, it is unique in that it ces intestinal tone, yet has little or no effect on talsis. In addition, the incidence of the more ersome peripheral side effects is low.

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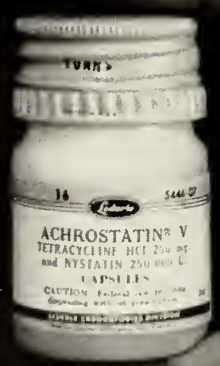
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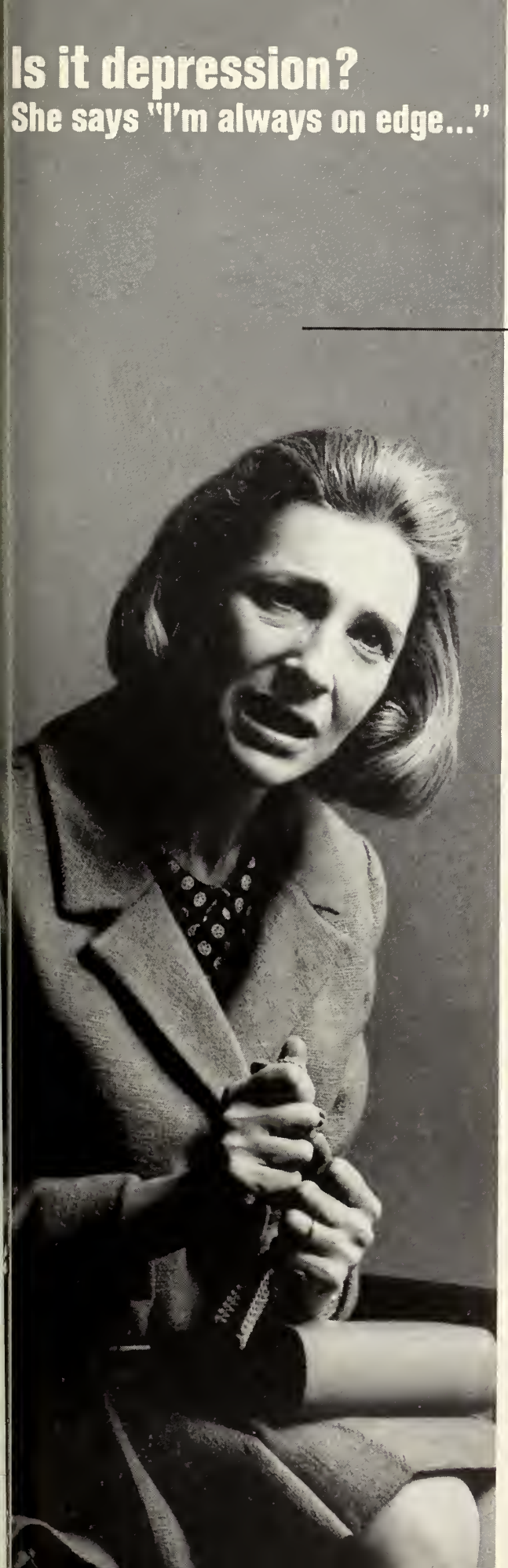


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anorexia, feelings of guilt
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when the diagnosis is depression

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Indications: Mental depression and mild anxiety accompanying depression.

Contraindications: Glaucoma and predisposition to urinary retention. Not recommended in pregnancy.

Precautions and Side Effects: Drowsiness may occur within the first few days of therapy. Patients should be warned against driving a car or operating machinery or appliances requiring alert attention. When depression is accompanied by anxiety or agitation too severe to be controlled by ELAVIL HCl alone, a phenothiazine tranquilizer may be given concomitantly. Suicide is always a possibility in mental depression and may remain until significant remission occurs. Supervise patients closely in case they may require hospitalization or concomitant electroshock therapy. Untoward reactions have been reported after the combined use of antidepressant agents having varying modes of activity. Accordingly, consider possibility of potentiation in combined use of antidepressants. Monoamine oxidase inhibitor drugs may potentiate other drugs and such potentiation may even cause death; permit at least two weeks to elapse between administration of two agents; in such patients, initiate therapy with ELAVIL HCl cautiously with gradual increase in dosage required to obtain a satisfactory response. Caution patients about errors of judgment due to change in mood, and that the response to alcohol may be potentiated. May provoke mania or hypomania in manic-depressive patients.

Side effects include drowsiness; dizziness; nausea; excitement; hypotension; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, including peripheral neuropathy; activation of schizophrenia which may require phenothiazine tranquilizer therapy; epileptiform seizures in chronic schizophrenics; temporary confusion, disturbed concentration or, rarely, transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of the mouth, blurring of vision, urinary retention, constipation; paralytic ileus; jaundice; agranulocytosis.

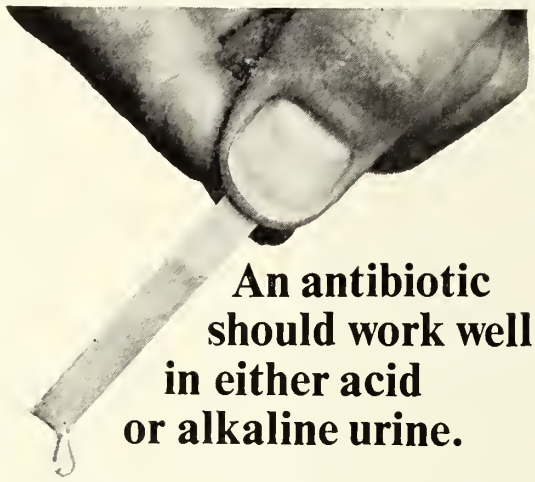
Careful observation of all patients is recommended. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lower dosage levels.

Supplied: Tablets ELAVIL HCl, containing 10 mg., 25 mg., and 50 mg. amitriptyline HCl, bottles of 100 and 1000; Injection ELAVIL HCl, in 10 cc. vials, containing per cc.: 10 mg. amitriptyline HCl, 44 mg. dextrose, 1.5 mg. methylparaben, and 0.2 mg. propylparaben.

For more detailed information, consult your Merck Sharp & Dohme representative or see the package circular.

MERCK SHARP & DOHME Division of Merck & Co. Inc. West Point Pa 19486

WHERE TODAY'S THEORY IS TOMORROW'S THERAPY



An antibiotic should work well in either acid or alkaline urine.

It isn't always necessary to adjust urinary pH in treating G.U. infections.

Not when the causative organism is a strain sensitive to DECLOMYCIN® Demethylchlortetracycline, as is often the case.

DECLOMYCIN remains stable and active in either acid or alkaline urine. So there's no need to acidify the urine to keep the antibiotic at work.

Why match the urine to the antibiotic...when you can match the antibiotic to the urine...by prescribing DECLOMYCIN. A b.i.d. dosage makes therapy convenient for your patient.

Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

Capsules: 150 mg; Tablets: film coated – 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.

355-8

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

The Bettmann Archive



Just one tablet at bedtime • Prevents painful night leg cramps • Permits restful sleep

How many of your patients stamp their feet at night and lose sleep because of painful leg cramps? Unless prompted, they usually fail to report this distressing condition and suffer needlessly.

One tablet of QUINAMM at bedtime usually controls distressing night cramps and permits restful sleep with the initial dose.

Prescribing information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Side Effects/Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856



Photo professionally posed.

No injection after all!

This penicillin produces high, fast levels—orally.

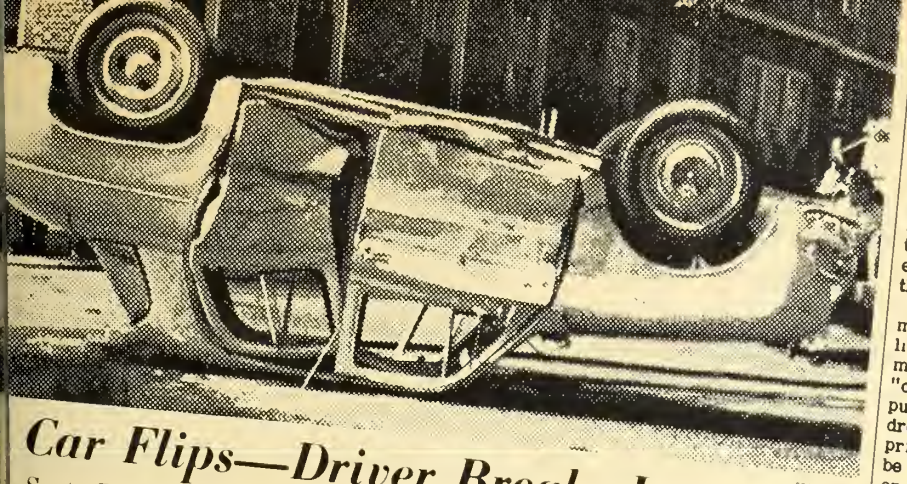
Pen•Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN•VEE® K**

(potassium phenoxymethyl penicillin) Wyeth



STAFF PHOTO

Car Flips—Driver Breaks Leg

Sept. 7. John P. Jones of incurred a broken leg today driving

Patrolman B. R. Brown, the car hit a fire hydrant and flipped over on its

issue, a tember th fications' ton dicta Althou made Mo down by a ter shar flat obje was pass Board McCredi tion" s' elimir the st. The c ment ca' limit ra mile li "cut-of public dren priv be b or th schoo The so so rathe

He's had enough excitement for one day.

For the patient who has been through an accident, the worry and anxiety following the experience may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—*to take the nervous "edge" off,* so the rest of the formula can control the pain more effectively.

Phenaphen® with Codeine

Phenaphen® with Codeine No. 2, No. 3, or No. 4 contains: *Phenobarbital* (¼ gr.), 16.2 mg. (Warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4). (Warning: may be habit forming).

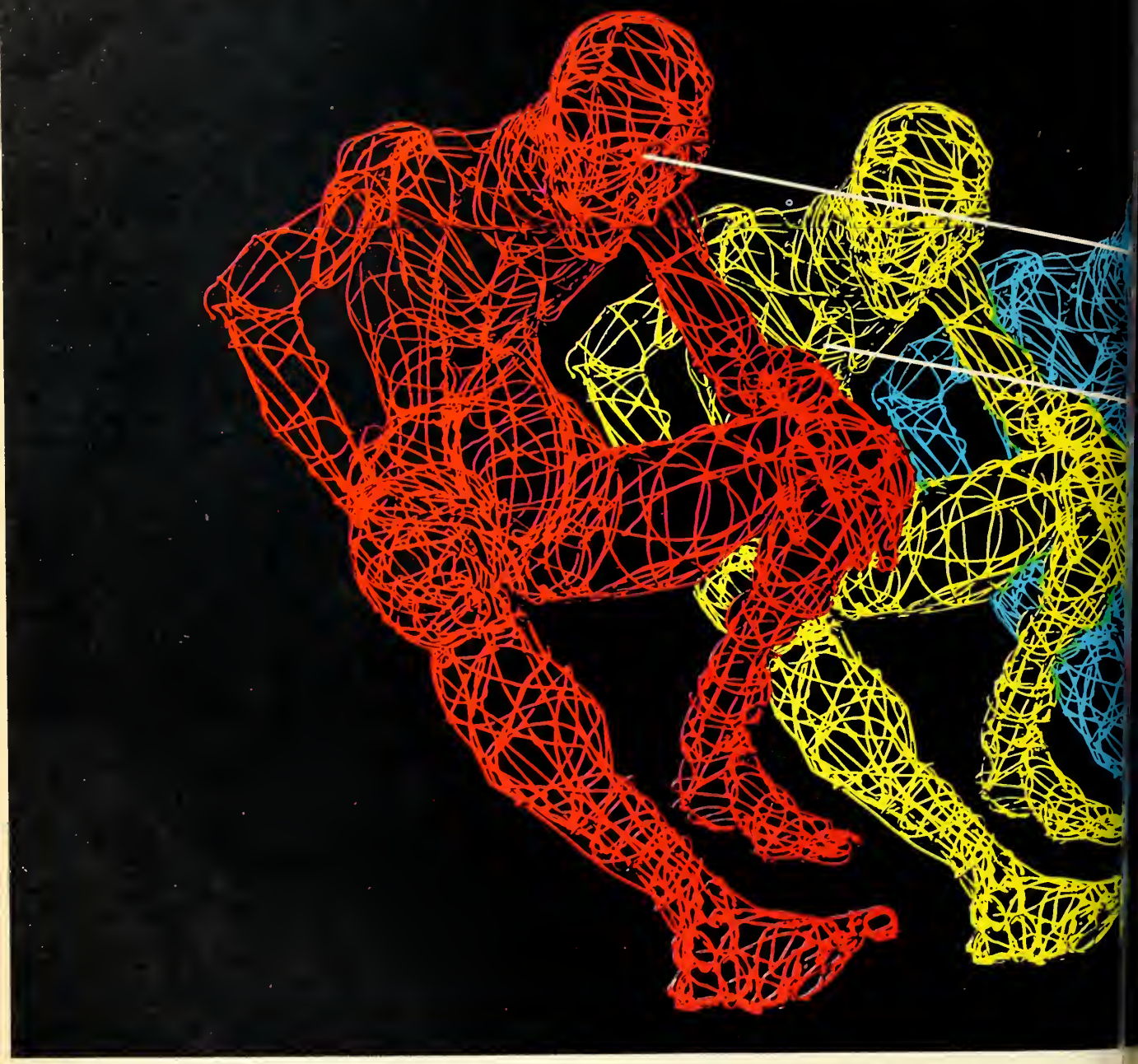
THE COMPOUND ANALGESIC THAT CALMS INSTEAD OF CAFFEINATES

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** 1 or 2 capsules at 2 to 4 hour intervals, or as directed by physician. For further details see product literature.

A H ROBINS COMPANY
RICHMOND, VA. 23220 A·H·ROBINS



a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	1 mg.

Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appro investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without ad vitamin B_{12} therapy may result in hematologic remission b rological progression. Adequate doses of vitamin B_{12} (pare or oral with potent intrinsic factor as in Trinsicon® [her concentrate with intrinsic factor, Lilly]) usually prevent, h improve the neurological changes.

As with all preparations containing intrinsic factor, resi may develop in some cases of pernicious anemia to the po tion of absorption of physiological doses of vitamin B_{12}. If ance occurs, parenteral therapy, or oral therapy with so massive doses of vitamin B_{12}, may be necessary. No singl men fits all cases, and the status of the patient obser follow-up is the final criterion for adequacy of therapy. P



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

nical and laboratory studies are considered essential and are commended.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastro-intestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects.

In extremely rare instances, skin rash suggesting allergy has followed oral administration of liver-stomach material. Instances of apparent allergic sensitization have also been reported after oral administration of folic acid.

Usage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

801668

Lilly

the antacid puzzle

In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

"will this one taste O.K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.



Only TUBEX® offers so complete a line of closed system injectables

and it's still growing.

To meet your present needs more precisely, the Tubex line comprises 37 different products in 69 dosage variations. And more are on the way.

Tubex offers these unit dose advantages:

- **accuracy**—premeasured, clearly labeled to help ensure correct medication
- **convenience**—no filling, no needle-sharpening, no sterilization, no cleanup
- **simplicity**—precision-made, well balanced syringe breech loads in seconds, permits easy aspiration
- **reduces risk**—single-use cartridge-needle units reduce risk of cross contamination; less chance of spillage reduces risk of contact sensitization for doctor or nurse
- **stability**—glass cartridges can't deteriorate or react with medication
- **acceptability**—presharpened, siliconized needles lessen pain of injection; patients appreciate single-use equipment

Just select, inject, throw away

TUBEX®

sterile cartridge-needle unit

Wyeth Laboratories Philadelphia, Pa.

Wyeth ©

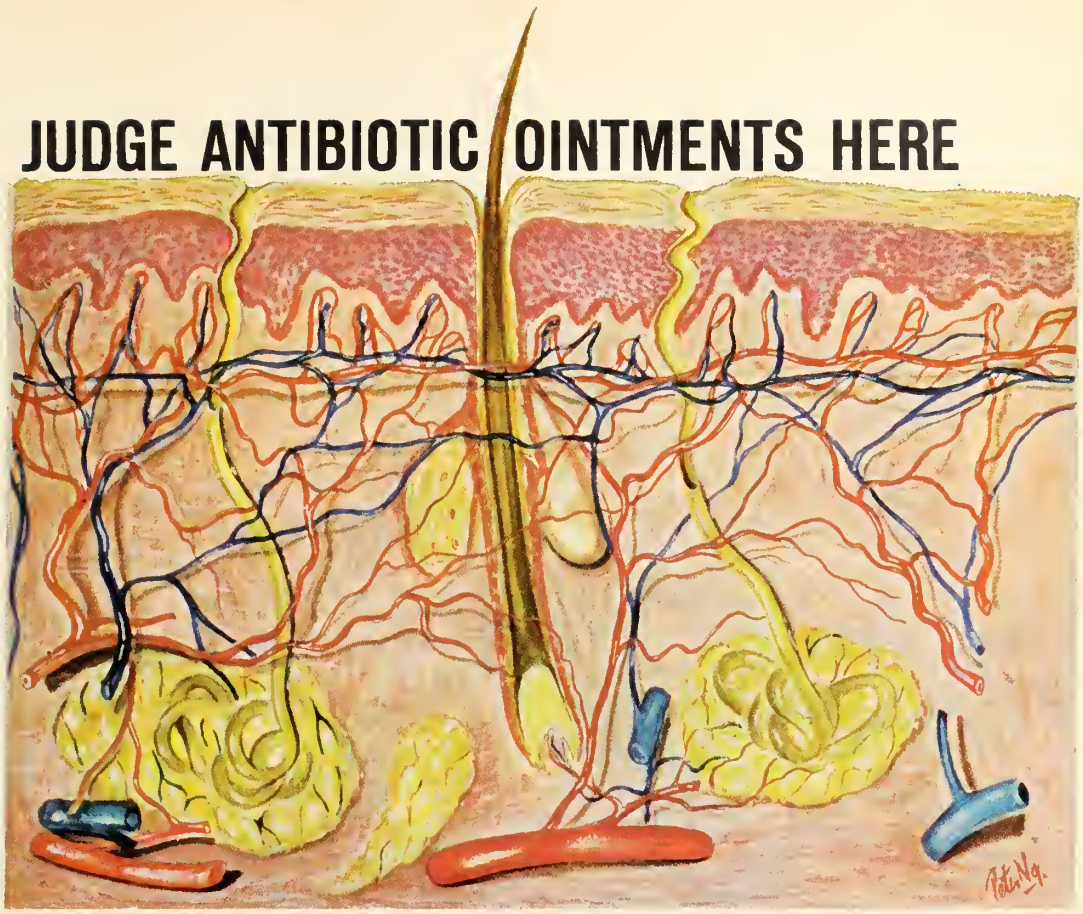
UD UNIT DOSE MEDICATION



This isn't the end of the line.

(New TUBEX® are constantly being added)

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

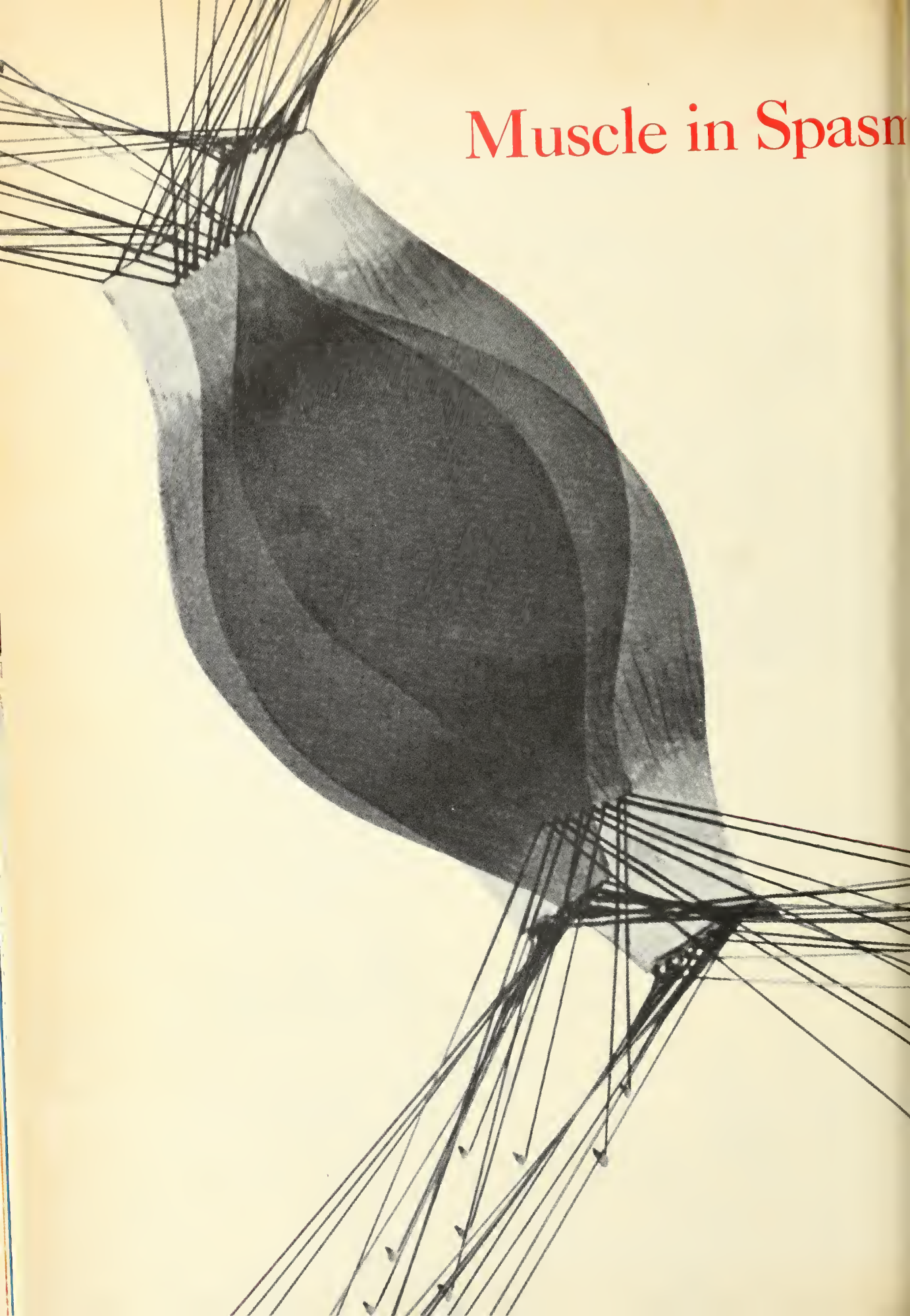
'NEOSPORIN'®

brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

Muscle in Spasm



and Valium (diazepam)

The ability of Valium to help relieve skeletal muscle spasm—as well as psychic tension—demonstrates its clinical value and versatility.

The muscle-relaxant effect obtained with Valium, used adjunctively with other drugs or physiotherapy, favorably affects the entire cluster of spasm-related symptoms . . . helps accelerate return to normal activity.

When skeletal muscle spasm and psychic tension coexist, the calming effect of Valium is an added therapeutic benefit that contributes to the total management of the patient.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Valium® (diazepam)
2-mg, 5-mg, 10-mg tablets

ROCHE
Roche® LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



Louie lost weeks with
a painful shoulder. That's a lot of fish.
It might have been different with **Butazolidin®** alk

100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate
1.25 mg. homatropine methylbromide

If it doesn't work in a week, forge t.

t please don't forget this:

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alka formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



Dosage in Painful Shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response. (B)R 46-070-A

For complete details,
please see full prescribing information.

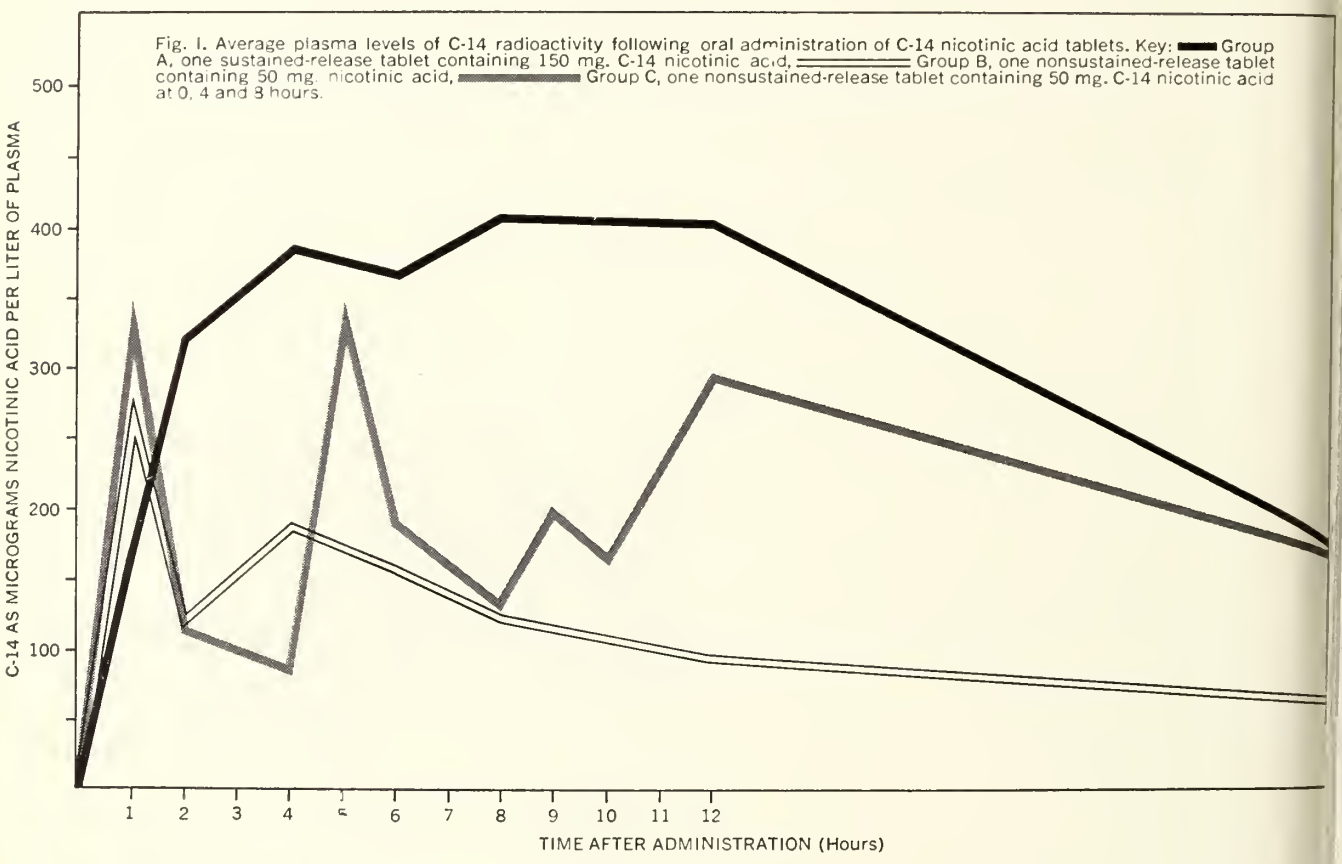
Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

BU-5926

Butazolidin® alka Geigy

Capsules
100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate
1.25 mg. homatropine methylbromide

Sustained circulatory, respirator and cerebral stimulation for th





(fewer absent doses by absent-minded patients)

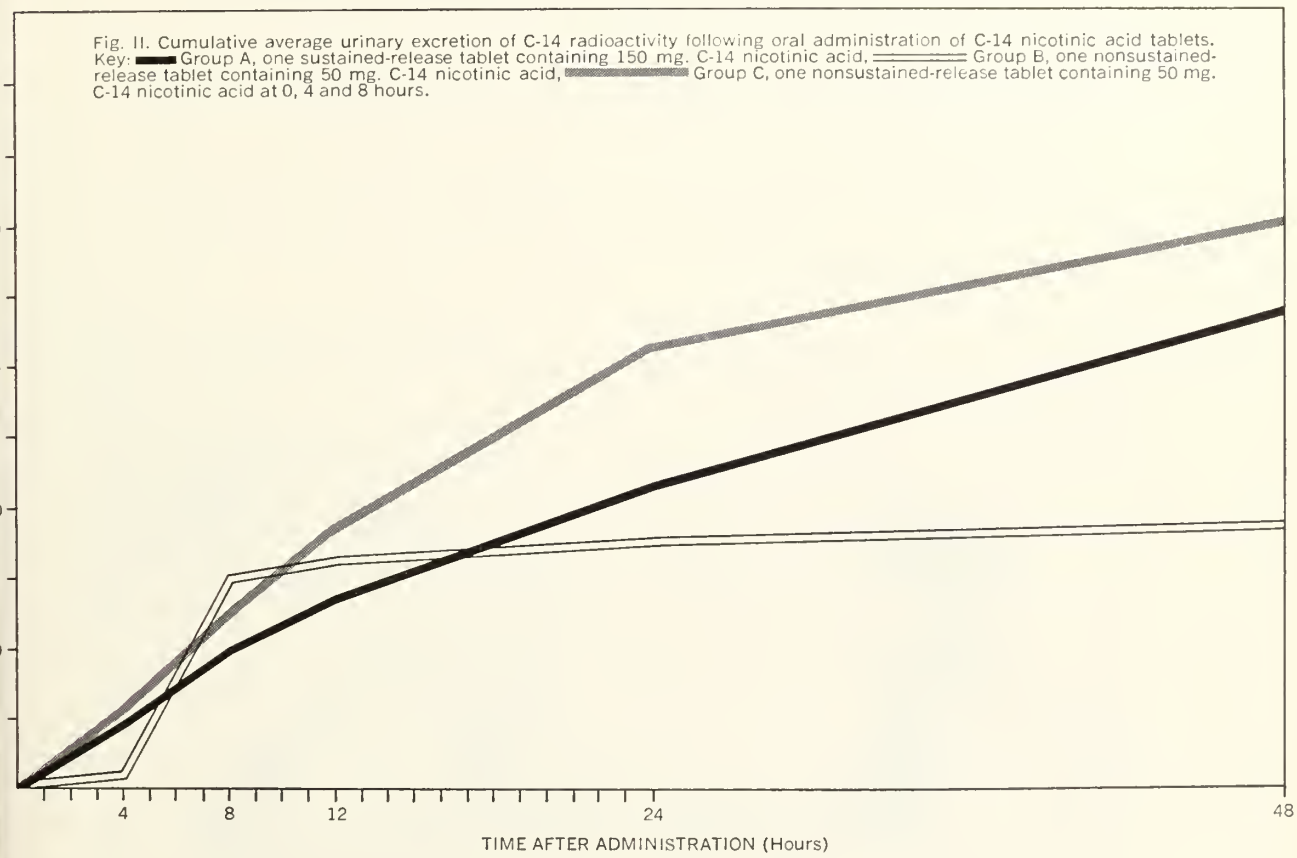
Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be co tinuous on a daily dose of only one Geroniazol TT ta let every 12 hours.

The gradual release of nicotinic acid in Geroniaz TT will provide the well-known peripheral vasodilat tion needed in patients with deficient circulation a with a minimum amount (if any) of "flushing." Al cerebrovascular circulation is complemented by pe tylenetetrazol, long-established as a cerebral and r piratory stimulant.

Geroniazol TT improves the typical, unfortuna signs of senile confusion. Patients become more ale

ged and debilitated



les confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and Pharmaceutical Industries Corp.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet



"Now that your acne is clearing up nicely, it might be a good idea if you started losing some weight."

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ENDOCARDIAL FIBROELASTOSIS IN SOUTH CAROLINA

ARNO R. HOHN, M.D.
HAZEL M. WEBB, M.D.

Primary myocardial diseases are a heterogeneous group of disorders that affect the myocardium and occasionally the endocardium. These endomyocardiopathies are relatively common in infancy and childhood.[1] Clinically they present themselves with a common syndrome, silent cardiomegaly. If murmurs are heard they are usually faint. However, atrio-ventricular valvular regurgitation or outflow obstruction type murmurs may be present. Such patients often manifest dyspnea due to congestive failure but are not cyanotic unless in shock. Sudden death as a result of severe rhythm disturbances or arterial embolization of a mural thrombosis is a constant threat.

Endocardial fibroelastosis is one of the most common of the endomyocardiopathies in pediatric patients.[2] While there apparently has been a decline in the incidence of this disease in certain areas, it has remained a problem to those caring for infants and children in South Carolina. Consequently, it was felt worthwhile to assess the cases of endocardial fibroelastosis seen at the Medical College of South Carolina to document the magnitude of the problem, and to review the features of this disease. Further, because of a recent report[3] suggesting differences of endocardial fibroelastosis among whites and Negroes, racial aspects of the disease will be reviewed.

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Patients and Methods:

Because of the difficulty in obtaining and evaluating clinical and pathologic material prior to 1960, this Charleston survey is limited to those born or dying between the beginning of 1960 and the end of 1967. Retrospective review of all cases labeled as endocardial fibroelastosis was undertaken by utilizing the autopsy files and records from the hospital and heart clinic of the Medical College of South Carolina.

Patients were included in this study if they fulfilled an extension of the criteria of Lambert, Shumway and Terplan[4] (Table I). That is, those patients under 4 years of age who had been clinically labeled as having endocardial fibroelastosis were included in the current series

Table I.
Criteria for Endocardial Fibroelastosis Diagnosis

Age.	Less than 4 years.
Clinical.	Congestive heart failure; no murmur or mitral insufficiency.
ECG.	Severe left ventricular hypertrophy with or without strain.
X-ray.	Gross enlargement of the heart, particularly the left ventricle.
Pathologic:	Grossly large heart. Dilated left ventricle with thick endocardium. Microscopic shows endocardium to be comprised of fibrous and elastic tissue. No inflammatory cells seen.

if they had unexplained onset of congestive heart failure associated with either no murmur or a murmur of mitral insufficiency, together with electrocardiographic evidence of left ventricular hypertrophy as manifested by voltage or T wave changes and a large heart on the x-ray film. In those who died, inclusion in this analysis was based on pathologic findings of a grossly and microscopically thickened endocardium, composed of fibrous and elastic tissue with absence of myocardial inflammatory reaction. Only cases without associated cardiac defects were included—hence only primary endocardial fibroelastosis was considered.

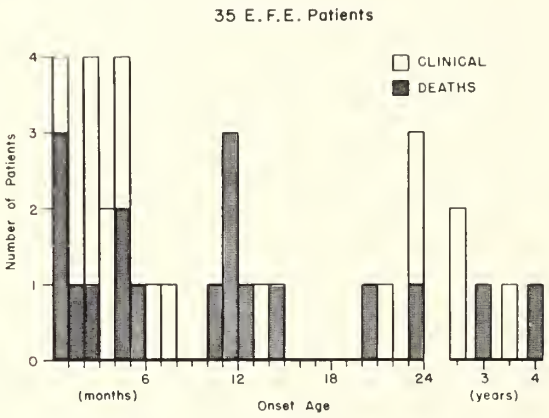


Fig. 1. Age at the time of diagnosis in 35 patients with endocardial fibroelastosis (E. F. E). The shaded areas represent those who subsequently died.

Results:

In all, 35 cases were uncovered during the 8-year study period who fulfilled the outlined criteria (figure 1). Of the 18 who subsequently died, 15 had post mortem examinations. Thus, 20 were included in this study on clinical grounds alone, utilizing the study criteria. While the majority of the South Carolina patients had onset of their symptoms prior to age 2 years, 8 were at or over this age when first detected. Two patients in this older group died. At autopsy both had evidence of the typical pathologic findings associated with endocardial fibroelastosis. One of these patients died suddenly, and consequently had no clinical data available. It is of interest

Table II.
1960-67 Pediatric Autopsies.

	Number of Autopsies	Congenital Heart Disease	Endocardial Fibroelastosis
Newborns	158	35	3
Children	246	46	12
TOTAL:	404	81	15

to note that all of the 8 patients with late onset of their symptoms were Negroes.

It can be seen in Table II that of a total of 404 pediatric autopsies performed during the period of 1960 to 1967, congenital heart disease appeared in 81. Surprisingly, endocardial fibroelastosis made up almost 19 per cent of those infants and children who died with congenital heart disease and 3.7 per cent of all pediatric autopsies. Consequently, endocardial fibroelastosis must be considered an important problem in South Carolina.

The age at the time of death of those patients in the current series is noted in Figure 2. The oldest was 5 years. As previously noted, three others died but

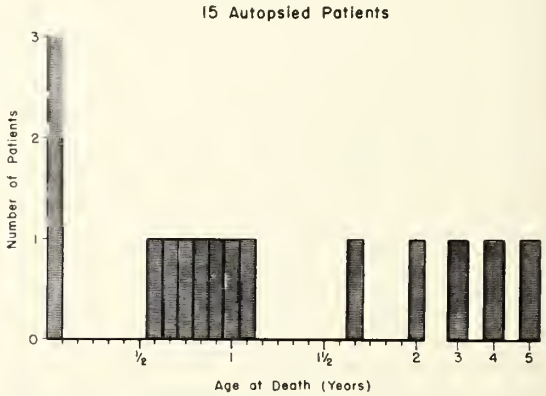


Fig. 2. Age at the time of death in 15 autopsy-proven cases of endocardial fibroelastosis.

were not autopsied. From the fact that these 3 patients pursued a typical clinical course with onset of failure prior to age 15 months, and all died under 3 years of age, it seems reasonable that had an autopsy been performed, the expected pathology would have been uncovered.

From the summary of the clinical findings in the 26 with available case histories

Table III.
Clinical Picture Found in 26 Patients with Endocardial Fibroelastosis.

History	Number
Dyspnea	21
Edema	4
Oliguria	3
Asymptomatic	0
Physical findings	**Number**
Congestive heart failure	26
Large heart	25
No murmur	17
Mitral insufficiency	9

(Table III) it can be seen that all patients were symptomatic and all had signs of cardiac failure. As anticipated, dyspnea was the most common complaint, being noted in 21 patients and, while not so labeled, may be surmised to have been present in 3 others who were simply recorded as being in "failure." Most had no heart murmurs, but 9 had clinical mitral insufficiency. All but one had markedly enlarged hearts documented by chest x-ray film. The exception had mild to moderate cardiac enlargement with a cardiothoracic ratio of 50 per cent. Of interest are the 4 who came in with edema; three of these had associated oliguria. In two,

Table IV.
Electrocardiographic Findings in 26 Patients with Endocardial Fibroelastosis.

Finding	Number of Patients
SV_1 equal to or greater than 20 mm*	14
RV_6 equal to or greater than 30 mm*	19
R_2 & $_3$ equal to or greater than 45 mm*	8
T changes V_1 and/or V_6	21
Normal	0

*The presence of any one of these criteria was considered evidence of left ventricular hypertrophy in the age group under consideration.

dyspnea was associated with edema, but in one it was the only complaint. This patient was a Negro, 2 years of age at the time of onset. Another of the patients whose disease began with edema subsequently had a cerebrovascular accident.

Twenty six patients had electrocardiograms available for analysis. (Table IV). All of these tracings were considered abnormal. In 17 instances, a left ventricular strain pattern was present, indicating the severity of the ventricular involvement. However, the abnormal T waves reverted to normal in 4 who are still alive, giving support to such reversion as a favorable

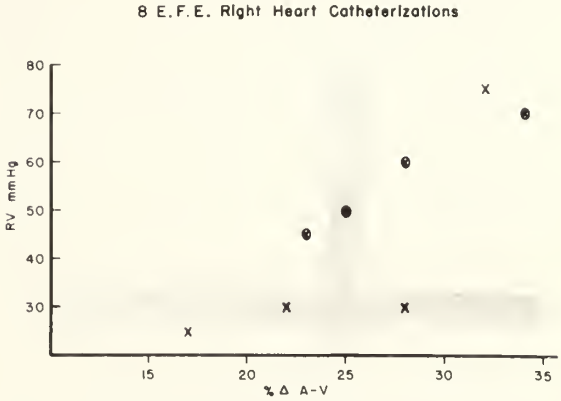


Fig. 3. Right heart catheterization findings in 8 patients with endocardial fibroelastosis (E. F. E.). The right ventricular pressure (R. V. mm Hg) is compared to the arterial-venous oxygen saturation difference. The shaded areas indicate the limits of normal. Each patient is represented by an "X". Those who had pulmonary artery wedge pressures measured are circled.

sign. Of those whose electrocardiograms were without T changes, all 5 had findings of left ventricular hypertrophy. In 2 there was associated right ventricular hypertrophy.

Right heart cardiac catheterization was carried out in 8 patients (figure 3). It can be seen that 5 had elevated right heart pressures and it is to be noted that in 4 of these 5 patients, the pulmonary artery wedge pressure was also elevated (it was not measured in the 5th). This finding suggests that the pulmonary artery pressure increase was probably due to left heart disease. Assuming an arterial oxygen per cent saturation of 95 per cent, 4 patients had arterio-venous oxygen differences greater than 25 per cent, which was taken as the upper limit of normal, suggesting that these patients were in heart failure at the time of the catheterization. Angiograms done from the right side of the heart in 3 patients showed the large left ventricular cavities with poor

systolic emptying, typical for endocardial fibroelastosis.

All 15 cases who came to post-mortem examination had large hearts (figure 4). The 3 cases listed as NK did not have weights recorded but were described as being large. In these 15 hearts, the gross findings were those of a greatly enlarged heart in which, when opened, a thick pearly white endocardium could be seen. Microscopic examination verified that the thick endocardium was composed of fibrous and elastic tissue. The myocardial fibers were hypertrophied, some vacuolization of the fibers was noted but there was no evidence of inflammatory reaction. In two of the newborn patients the diagnosis was evident only by microscopic evaluation, but both of these had markedly hypertrophied right ventricles with small left ventricles, and could be considered examples of the contracted type of endocardial fibroelastosis.

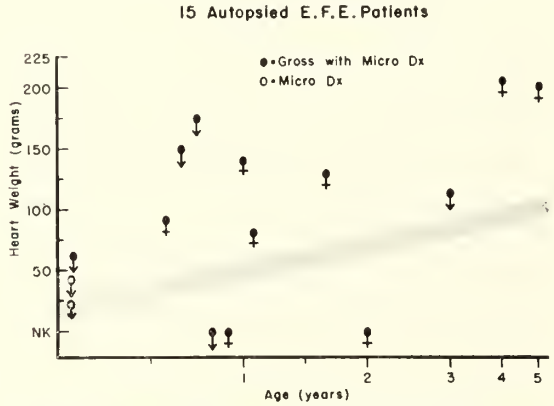


Fig. 4. Autopsy findings in 15 patients with endocardial fibroelastosis (E. F. E.). The shaded line represents the limits of normal heart weight. "N. K." indicates weight "not known". Sex is indicated by the usual symbols. The two patients indicated by open circles had their diagnosis confirmed by microscopic examination only and were felt to have the contracted type of the disease.

There were 7 males and 8 females among the autopsied patients, whereas for the group as a whole there were 20 males and 15 females. This is the converse of the experience reported from Toronto and Rochester,[5] indicating that Gasul, Arcilla and Lev[6] were probably right when they stated that endocardial fibroelastosis did not have any definite sex predominance.

Comment:

From the fact that two major centers of pediatric cardiology accumulated only 78 cases of endocardial fibroelastosis in an earlier 8-year period,[5] it is felt that the 35 cases found at the Medical College of South Carolina constitutes a significant series. However, there is data to suggest that many more cases of endocardial fibroelastosis exist in South Carolina. From the 1966 study of Mitchell and coworkers,[7] an incidence of 1 case per 5 or 6 thousand births was found. Utilizing this information, and the fact that about 50 thousand babies are born in South Carolina each year, there should have been about 80 patients with endocardial fibroelastosis born during the current 8-year study period. Thus, it is likely that less than half of such cases come to Charleston.

About two-thirds of the patients in the current series were Negroes (24/35), as were 9 of the 15 who died. Negroes usually comprise about 55 per cent of the Medical College of South Carolina pediatric hospital admissions and 35 per cent of the heart clinic population. Thus, the percentage of Negro endocardial fibroelastosis patients is disproportionate to the usual distribution of patients by race. The three patients who died in the first month of life were white, whereas all 8 who had documented onset of their symptoms when 2 years of age or older, were Negroes. Clinical data from the 7 who had available records are recorded in Table V. This late onset, association with edema in 4 patients, in 2 of whom it was the only complaint, and long course (6 of the 7 are still alive), is in keeping with the report of McLoughlin, Schiebler and Krovetz,[3] who had 6 Negro patients whose symptoms began at age 2 years or over in their group of 30 patients with endocardial fibroelastosis. The 6 were alive at the time of the 1966 publication. These authors felt

Table V.

Features of Endocardial Fibroelastosis in the 7 Patients with Available Data Who had Late Onset of the Disease.

Age at onset (years)	Race	Presenting Complaint	Electrocardiogram	Cardio thoracic ratio (per cent) by x-ray	Clinical Course
2	Negro	dyspnea edema	T changes	"large"	alive at 6½ years
2	Negro	edema	T changes	79	alive at 3 years
2¼	Negro	dyspnea	T changes	63	alive at 3½ years
2½	Negro	edema oliguria	LVH	50	alive at 8 years
2½	Negro	dyspnea	LVH	67	alive at 5½ years
3½	Negro	dyspnea edema	T changes	79	alive at 7 years
3¾	Negro	dyspnea	T changes	65	died at 4 years

T changes = abnormal T waves in V_1 and/or V_6; LVH = left ventricular hypertrophy.

that their Negro patients definitely had endocardial fibroelastosis and did not have a disease similar to the cryptogenic disease found in African adults because of the favorable course, the lack of embolic phenomena and the pathologic material available. It resembled the anticipated findings of endocardial fibroelastosis, rather than that reported by Stein and Associates[8] for African children with cardiomyopathy. Nevertheless, from as yet undocumented observations at the Medical College Hospital of South Carolina, and the study of Phillips and Burch,[9] it is suggested that endomyocardial diseases are more common in the American Negro and thus perhaps some relationship exists between endocardial fibroelastosis in the American Negro child and endomyocardial fibrosis in the adult.

In contrast to a previous report,[5] there was no relationship of maternal age to endocardial fibroelastosis in the Charleston series. 10 patients of the 26 with available data were born to mothers who were in the third decade of life. The rest were distributed equally above and below this age group.

No data were available concerning possible maternal viral infections during the pregnancy with the patients under consideration in this report. The relationship of endocardial fibroelastosis to intrauterine infection has long been a subject of speculation. Fruhling in 1962[10] suggested the coxsackie virus group as etiologic agents and, more recently, the mumps virus has come under scrutiny.[11] The data presented by Mitchell and associates[7] in their analysis of 40,000 live infants in the Collaborative Study of Cerebral Palsy, seem to make this an unlikely avenue of etiologic explanation for endocardial fibroelastosis. With thorough prospective virologic investigation, utilizing complement fixation techniques for 28 viruses, including coxsackie and mumps, these workers could not implicate any virus in their 7 known cases.

Exploring the family histories of the South Carolina series, only 2 patients were found to have relatives with heart defects. However, one of these is of interest. This patient was one of the 3 newborns who was thought to have the contracted form of endocardial fibroelastosis. He died at age 3 weeks. A brother was catheterized at age 3 months because of refractory heart failure and found to have a ventricular septal defect with a pulmonary to systemic flow ratio of 2 to 1. In addition, he had a gradient of 40 mm Hg across the pulmonary valve. A slow downhill course followed the catheterization and he died

in another hospital at age 5 months. Autopsy showed a very much hypertrophied right ventricle and a deformed stenotic pulmonary valve with markedly thickened valve cusps. No ventricular septal defect could be demonstrated nor was there evidence of endocardial fibroelastosis. The relationship of the cardiac disease in these siblings remains obscure, but there may be some genetic defect in the family, for 3 other siblings are retarded.

Having found in South Carolina reservoir of endomyocardiopathies, particularly endocardial fibroelastosis, we are in the process of setting up a prospective study of such cases. It is planned to follow the natural course of these patients with serial hemodynamic evaluation to determine whether or not their disease actually differs from the classic reports in the literature.

Summary:

While endocardial fibroelastosis is one of the most common of the endomyocardial diseases found in infancy and childhood, it has been seen less frequently in certain areas. However, in South Carolina this disease remains a major pediatric cardiac problem. Endocardial fibroelastosis was found to comprise almost 10 per cent of the infants and children who died with heart disease between 1960 and 1967 at the Medical College of South Carolina. In all, 35 cases were diagnosed as having this disorder during this time period. Most had typical features of dyspnea, indicating congestive failure early in life, with silent cardiomegaly, particularly of the left ventricle. However, 8 patients, all Negroes, developed signs of endocardial fibroelastosis at or past the age of 2 years. Some of these patients had unusual clinical features. More study, especially with serial hemodynamic investions, is indicated to determine whether or not the disease in the Negro is a distinct entity or simply a variant.

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FURTHER EXPERIENCE WITH CORONARY ARTERIOGRAPHY

GRADY H. HENDRIX, M.D.

A recent report in this journal described our initial experience with coronary arteriography at the Medical College of South Carolina and the Veterans Administration Hospital, Charleston, South Carolina, and the indications, findings, and disposition of the first 32 patients who underwent this procedure.[1] The following indicates our experience on 90 patients undergoing coronary arteriography prior to April 1, 1968.

Indications

The indications in this group are illustrated in Table I. Forty-one patients were subjected to this procedure for diagnostic purposes, 35 were felt to be potential candidates for coronary surgery, and 14 were patients with aortic valve disease.

Findings

The group of patients with disabling chest pain without other evidence of heart disease, with normal resting electrocardiograms, negative double Master Test, and negative exercise treadmill testing had normal coronary arteriograms. It was felt that in this group of patients, clinical coronary artery disease could be excluded as the cause of their chest pain.

The three patients with disability as shown by electrocardiograms without other evidence of heart disease had normal coronary arteriograms. These electrocardiographic abnormalities consisted of one case each of right bundle branch block, non-specific ST-T changes, and premature ventricular beats. All three of these patients had been denied employment because of the electrocardiogram.

The seven patients who had cardiomegaly and congestive heart failure were Negro males between the ages of 35 to 45 years without hypertension, angina, infarctions, or valvular heart disease. Six of these patients had normal coronary arteriograms, whereas one had 90% obstruction in the middle one third of the right coronary artery with normal coronary arteries otherwise. The four patients with idiopathic atrial fibrillation were between the ages of 35 to 48 years and were white males. There was no evidence of heart disease other than atrial fibrillation. Two of these patients were alcoholics and had normal coronary arteriograms. The other two had significant coronary artery disease and neither drank to any degree. Possibly, these patients with normal coronary arteriograms and heavy ingestion of alcohol may have atrial fibrillation on the basis of alcoholic effects upon the myocardium. Two patients were studied because of episodes of paroxysmal atrial tachycardia. One was a 35 year old vet-

Table I
Indications for Coronary Arteriography on 90 Patients Medical College of S. C. and VA Hospital

I.	Diagnostic	
	A. Disabling chest pain without other evidence of heart disease	25
	B. Abnormal "disabling" electrocardiograms without other evidence of heart disease	3
	(1) Right bundle branch block	1
	(2) Non-specific ST-T changes	1
	(3) Premature ventricular beats	1
	C. Heart disease not suggestive of coronary artery disease	13
	(1) Cardiomegaly and congestive heart failure	7
	(2) "Idiopathic" atrial fibrillation	4
	(3) Paroxysmal atrial tachycardia	2
II.	Evaluation for coronary surgery	35
III.	Evaluation of coronary arteries in patients with aortic valve disease	14

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Presented at Scientific Session, South Carolina Heart Association, Hilton Head, South Carolina, May 25, 1968.

eran who had vague chest pain and a normal coronary arteriogram. The second was a 39 year old man who had had episodes of paroxysmal atrial tachycardia since age 16 but for the past two years experienced substernal burning pain with the tachycardia. Coronary arteriograms showed 90% obstruction of the marginal branch of the circumflex coronary artery. His exercise electrocardiogram was normal but electrocardiograms during an episode of atrial tachycardia showed ischemic ST-T changes.

The 35 patients in the group who were felt to be potential surgical candidates had chest pain typical of or very suggestive of angina with diagnostic resting or exercise electrocardiograms. No patients were in clinical heart failure. All 35 patients had coronary arteriograms showing at least 50% obstruction in at least one major vessel.

Coronary arteriography continues to be a valuable aid, and is essential in the evaluation of patients with aortic valve disease who are potential surgical candidates for their valvular disease. Fourteen patients have now been studied in this group.

Disposition

The disposition of those patients without coronary artery disease does not require any significant discussion. The patients who underwent coronary arteriography due to heart disease not suggestive of coronary artery disease and patients with aortic valve disease were treated individually, and the information gained by arteriography was helpful in the care of these patients and in making surgical decisions where needed.

Nine patients have had left internal mammary pedicle implants without mortality or significant morbidity.* Nine are felt to be potential surgical candidates but have improved on a more adequate medical program and are being followed for the present. Fourteen patients were felt to have extensive "three vessel" disease

Table II
Coronary Disease Evaluation

I. History and physical
II. CBC, urinalysis, FBS and 2 hour PC blood sugar or glucose tolerance test, BUN, uric acid, cholesterol
III. PA and lateral chest films
IV. Electrocardiogram
  A. Resting
  B. Double Master Test
  C. Maximal stress on treadmill
V. Coronary arteriography and left heart catheterization
  A. Visualize coronary arteries
  B. Measure left ventricular end diastolic pressure
  C. Left ventriculogram

and surgery was not done. Three of this group have subsequently succumbed to acute infarctions. One patient was felt to have such severe basilar artery insufficiency that he was not a surgical candidate. One patient refused surgery and one was found to have suffered an acute infarction two months prior to study; we do not feel that surgery should be performed until at least six months after myocardial infarction. This allows the patient to gain all benefit from natural collaterals and also reduces the operative risks involved.

The first significant complication from coronary arteriography has occurred in a 39 year old man who had 90% obstruction of the anterior descending branch of the left coronary artery and suffered an acute anteroseptal myocardial infarction during the procedure, from which he convalesced uneventfully.

Discussion

Our approach to the evaluation of patients who have coronary artery disease or are suspected of having such is outlined in Table II. We feel that this represents a rational approach to such individuals. The mortality factor in coronary arteriography continues to be about 1 per

*Surgery performed by Dr. R. R. Bradham, Associate Clinical Professor of Surgery, Medical College of South Carolina, and Consultant in Thoracic Surgery, VA Hospital, Charleston, South Carolina, and Dr. Dallas Dalton, Assistant Professor of Surgery, Medical College of South Carolina, and Chief, Thoracic Surge.y Section, VA Hospital, Charleston, South Carolina.

1000 in large series, and coronary arteriography and left heart catheterization is performed only after the other studies have been done and when it is felt it will contribute significantly to the diagnostic or therapeutic aspects of the patient's care.[2-3]

An adequately performed exercise electrocardiogram continues to be most helpful as an index of the presence of coronary disease. The degree of coronary artery disease that can exist in spite of the patient having a normal resting electrocardiogram continues to be quite striking. However, the exercise test is almost universally positive if performed maximally in these individuals. We have seen eight patients with total obstruction of the right coronary artery with normal resting electrocardiograms.

Table III summarizes a number of factors, comparing patients with coronary artery disease to patients without coronary artery disease in this group of 90 patients. There continues to be a rather striking difference as regards family history, uric acid, and serum cholesterol. The hematocrit is slightly higher in those patients with coronary artery disease.

Table III

Comparison of group with normal coronary arteriograms with group with definite coronary artery disease arteriographically.

	Normal (48)	Coronary Disease (42)
Average age and range	41 (29-57)	47 (36-57)
Race—per cent white	65%	98%
Family history of coronary disease	20%	50%
Smoke cigarettes	64%	71%
Consume alcohol	52%	31%
Hematocrit reading	43 mm	45 mm
Diabetes	6%	14%
Average FBS	91 mg/100 ml	93 mg/100 ml
Average uric acid	5.7 mg/100 ml	6.3 mg/100 ml
Average BUN	14 mg/100 ml	17 mg/100 ml
Average cholesterol	209 mg/100 ml	253 mg/100 ml

Summary

Further experience with coronary arteriography leads us to believe that it is helpful diagnostically and prognostically in the evaluation of patients with or suspected of having coronary artery disease. Experience at our institution with myocardial revascularization procedures is limited, but continues to grow; and we feel that it potentially offers hope for the relief of ischemic pain in carefully selected patients. We feel that our experience to date justifies our continuing emphasis on this aspect of heart disease in the future.

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THE PALMETTO CENTER FOR ALCOHOLISM

WALTER R. MEAD
Florence, S. C.

The care of the chronic alcoholic in South Carolina underwent a revolutionary change some five years ago in the construction and staffing of Palmetto Center on the outskirts of Florence. The operation of this treatment center is unfamiliar to the majority of physicians of this state. For this reason, it is thought appropriate to describe its workings in some detail from the standpoint of one who has had experience with the old methods of treatment and who has become familiar recently with the procedures which are being employed in this relatively new facility.

No attempt is made at Palmetto Center to treat the acute phases of chronic alcoholism. Although requirements for admission include a provision for sobriety, there is no manner in which this can be strictly enforced. Consequently it is inevitable that the occasion should arise frequently when recently admitted patients require some medication to control the anxiety and tension incidental to withdrawal. However, should these symptoms reach a critical stage suggesting the imminence of delirium tremens or other major crisis the patient is immediately transferred to one of the general hospitals in Florence, all of which permit admission on a diagnosis of acute alcoholism. Medication for control of withdrawal manifestations plays a very minor role at Palmetto Center. Since all patients are addiction prone, the staff uses sedatives and tranquilizers with extreme caution and insists on their discontinuance at the earliest possible moment.

Group therapy, skillfully supervised by individuals trained in the field of psychology, is the keynote of treatment. Each patient, without exception, is exposed to this type of therapy which has several goals—1) to enable the patient to establish an intimate relationship with others who have the same disease, thus breaking through the barrier of loneliness behind which he has grown self-centered; 2) to provide a mental laxative whereby he may vocalize the various problems he has been suppressing thereby creating feelings of guilt, remorse and hostility; 3) to reestablish the patient's self esteem by enabling him to help others in troubles similar to his own; and 4) to work out a program whereby he can plot a course leading to economic stability on leaving the rehabilitation center.

To anyone unfamiliar with the techniques of group therapy, the opportunity to sit in on one of these sessions would be a unique and revealing experience. On an average, groups consist of some eight to ten individuals who meet daily except Saturdays and Sundays. Each therapy session covers a period of at least one hour. During this time each patient has the opportunity to ventilate his problems and listen to the response they elicit from the other members of the group. This exchange of experiences and ideas is cloaked in complete confidentiality, each group member being initiated at the outset with the solemn necessity of avoiding comment outside the group. Without this assurance that his problems will never be known to others than his own group members, patients would be unwilling to elaborate, as they do, on the various features of the problems which ended up in their uncontrolled dependence on alcohol in some form. These features cover every aspect of everyday living—domestic prob-

lems, marital difficulties, economic pressures, business worries and a host of others.

On an initial interview each patient is questioned in considerable detail about his previous medical history, his marital history, his family history as it pertains to early influences that may have developed into major psychological problems in later life. In addition, the story of his early experiences with alcohol is brought out and recorded together with the development pattern of chronic alcoholism whether it be of the spree variety or the plateau type. In most cases the incidents and consequences of his alcoholic career have left deep scars in the patient's subconscious which are only remedied or erased by ventilation. His companions in his group help to bring these incidents and worries to the surface by repeated questioning. The pathological psychological picture which gradually evolves during these group sessions reveals such varieties of psychic pain as innate hostility, feelings of inferiority, grief, loneliness, guilt and others which he can only anesthetize with alcohol. While it is the function of the therapist to recognize these abnormalities of personality, no amount of personal interviewing can elicit the telltale symptoms which appear during the interchange of questions and answers in the course of the group session. And no advice proceeding from the therapist is nearly as effective as that which the group offers as coming from a source exactly on the same level as the patient. Group therapy, however, is not the only opportunity for patients to ventilate their innermost feelings. This is done repeatedly throughout the day when newly made friends confide in one another in small gatherings outside the more formal group sessions. Similarly such exchanges take place within the confines of the dormitory rooms which, after the first few days, are always occupied by at least two patients.

Exposure to this type of environment elicits a change in the patient's personality which is noticeable to the staff and patients within the first forty-eight hours. Some are initially bewildered on learning that there are others besides themselves who are interested in their future and stand ready to lend a helping hand. This bewilderment is quickly dispelled in initiation into a beginners group before ultimate assignment to the group in which the patient will participate throughout his stay at the Center. The role of the therapist is to encourage total ventilation of the psychic problems of each group member. At the same time he must skillfully divert the conversation away from the so-called drunkelogue or recital of the various forms of abnormal behavior of which the patient has been guilty while drunk. A clerical background for the therapist has been found especially valuable for the staff at the Center. Most ministers during their seminary years have had specific training at mental institutions in the essentials of counseling from the psychological angle.

To the uninitiated the detailed recital of the innermost thoughts of a troubled mind may seem too uninhibited and amazingly intimate, but they almost always excite a response from some other member of the group who has had similar thoughts but has kept them suppressed. From such interchange of confidences often develops a plan of approach which might otherwise have been overlooked.

Group therapy, while occupying a central spot in the routine at Palmetto Center, is but one of the facets of treatment there. Among other approaches should be mentioned workshop, recreation, staff conferences and religious discussion. Each group spends at least three periods every week in the workshop where there is a choice of many forms of handiwork among which the individual patient chooses one which appeals to him. Here under trained supervision the patient may engage in leather work, ceramics, wood work, copper

tooling, metal etching, sewing, knitting, glass etching or work with ceramic tile. Workshop experience enables the staff to relate to patients in a somewhat more relaxed atmosphere and by vocational testing to bring to light those abilities which can be used as a guide to subsequent gainful employment.

The recreation program at Palmetto Center is a very essential feature, permitting, as it does, a close relationship between patients on a friendly competitive basis. Such vigorous sports as volley ball, table tennis, soft ball and badminton are provided and made available to all who have spare time.

Space for these sports is somewhat limited but plans are on foot for major extension in these exercises. Shuffleboard has been a mainstay in recreation since the Center was first built with covered walkways. It is even hoped that a small area of the campus may be utilized as a golf chipping and putting green. Card games and Bingo fill up any blank spaces in the day or evening activities, while television is an everpresent source of entertainment for those not engaged in group therapy or workshop. Recreation is under the direction of a man trained in the field of such sports as can be promoted under institutional limitations. Unimportant as it may seem, a simple victory in a competitive sport affords a real boost to a patient's ego which means a lot in reestablishing self confidence.

An additional and extremely valuable feature of the therapy at the Center is the use of audiovisual aids of all descriptions. Movies detailing the various steps in the development of alcoholic addiction are shown frequently as a preliminary to some group discussions where the patients pick out the various steps depicted and apply them to their own problem. A library of some fifteen sound films is continually updated.

Many alcoholic rehabilitation centers focus on an emotional religious experience as the turning point toward a successful outcome of treatment. At Palmetto Center religion is an essential ingredient but not a compulsive factor in rehabilitation. Most patients have lost touch with their church affiliation either through neglect or from the feeling of being an outcast. To remedy this situation two features are open to all patients on a voluntary basis—morning devotionals and religious discussion groups. The devotionals are conducted by patients who are chosen at the weekly "community meeting" and failure to attend each morning usually marks the recalcitrant as a bit out of step with the program. For his absence he is usually gently reminded by other members of his group and more often than not his regular attendance is then resumed. The religious discussion groups are held twice each week under the guidance of the chaplain. Here the doubts and questions which many patients develope regarding the role of religion in their reformation are discussed in a low-key atmosphere leading to a reasonable solution of their problems without undue emotional stress. It is often amazing to hear patients in these groups discuss abstruse metaphysical theories with a depth of understanding wholly at variance with their educational background.

Staff conferences are held at frequent intervals at which every patient sooner or later is evaluated in the light of standard psychological tests to which he has been subjected. When these conferences reveal indisputable evidence of organic disease, either mental or physical, for which the Center is unable to provide adequate treatment the patient is dismissed in the care of some agency equipped to handle the situation. Psychiatric evaluation of each patient is a sine qua non of his or her continued stay at the Center. For this purpose the Center is able to command the services of two psychiatrists who sit in with the resident staff at these biweekly staff conferences. No patient is

dismissed arbitrarily except for gross breach of rules, such as procuring liquor surreptitiously or unseemly conduct. The discharge of each patient is a matter of concern to the whole staff and to members of his therapy group, consequently preparations for his discharge are common knowledge and are discussed both by his group and at the general staff conference. When there is unanimous opinion that the patient has taken full advantage of the facilities at Palmetto Center or has shown inability to participate actively in the program, then his discharge is approved. But his discharge from the Center is only one step in the continuation of therapy. While he is an inpatient he is urged to attend the weekly meetings of Alcoholics Anonymous which are held every Monday and Thursday night and are conducted by representatives of one of the numerous A.A. groups scattered over the state. Thus he is indoctrinated with the A.A. philosophy in the hope that he will continue his A.A. affiliation indefinitely after his discharge. Or through Vocational Rehabilitation counselors throughout the state to whom the Center refers him, he is kept in touch with and urged to attend group therapy sessions that are conducted in numerous population centers over the state.

However, the role of the Vocational Rehabilitation counselor covers a far greater area than reminding the discharged patient of the facilities available for continuation of the type of psychotherapy enjoyed at Palmetto Center. By frequent contact with the counselor job opportunities are repeatedly brought to his attention and training programs suggested to better fit him for some gainful occupation.

The follow-up program involving the discharged patient has many angles in most of which the Center functions in some manner. Often it is a question of where the patient can find quarters in which to live since many patients come from broken homes and many have no homes at all. Half-way houses, or as they are frequently called, Flynn Homes, offer a ready solution to this angle. Unfortunately too few communities in South Carolina have seen fit to undertake the support of such a place where the recently discharged patient may find lodging and board at a nominal cost while interviewing job prospects and keeping in touch with his vocational counselor and attending A.A. meetings or out-patient group therapy sessions.

One unique feature of the life at Palmetto Center is the program of housekeeping and general institutional maintenance in which each patient is expected to contribute a share in keeping with his or her ability. To insure fair distribution of these necessary and sometimes unpleasant tasks a community meeting is held each week at which chairmen and chairwomen of the various work categories are chosen, each empowered to assign specific duties to other patients. In this manner one patient is given supervision over such kitchen work as dishwashing and table preparation, another over recreation and so on through devotionals, gardening, room cleaning, clothes washing and A.A. programming. A trained dietition is in charge of menu preparation and cooking and serving meals. Any patient who refuses such assignment or neglects the tasks in his or her category is promptly reprimanded by others who share their work. No more democratic or cooperative or self disciplined group can be imagined than the patient group at Palmetto Center.

The foregoing may leave too glamorous a picture of the procedures at Palmetto Center. Let it be remembered that the currently held opinion that chronic alcoholism is a distinct disease with both physical and psychological manifestations is a comparatively recently adopted concept and that the present method of treatment is probably only a faltering step toward a more specific program where results will be more predictable. Palmetto Center

makes no claim to having all the answers to this great problem nor proposes to publicize the percentage of its patients who have attained a degree of sobriety sufficient to permit their reentry into normal society. Suffice it to say that while there are sometimes failures, there are also many brilliant successes.

X-RAY FILM OF THE MONTH

S. E. PUCKETTE, JR., M.D.
Medical College Hospital
Charleston, S. C.



The PA and lateral films illustrated here were taken on a 38 hour old newborn shortly after an attempt at an internal jugular puncture. On aspiration, during the puncture, air filled the syringe. Although the breath sounds remained the same, puffiness was noted on the right side of the neck and crepitation elicited.

The child was being evaluated for jaundice which was eventually determined to be secondary to ABO incompatibility.

This is a good example of air in the mediastinum. The mass in the upper left lung field is the thymus, which has been pushed laterally by the air-filled mediastinal tissues.

Accumulations of air in the mediastinum may occur as a complication of the hyaline membrane syndrome, pneumonia, forced resuscitation with positive pressure apparatus, spontaneously or from puncture of the pulmonary tissues, as in this case. In the former situations, varying degrees of air block in the bronchial tree may cause increased pressure within some alveoli with subsequent rupture into the interstitial tissues and perivascular planes. This interstitial air then may track back to the mediastinum or may rupture into the pleural space.

The diagnosis of pneumomediastinum is not difficult on a PA film. The lobes of the thymus, if not recognized for what they are, may be mistaken for areas of pneumonia or atelectasis. A lateral view is usually the most satisfactory projection for definitely establishing the presence of a pneumomediastinum. A high degree of lucency in the anterior and superior parts of the mediastinum should be looked for. Air in the soft tissues of the neck should always alert one to look for pneumomediastinum.

When such abnormal accumulations of air are small and are associated with minor symptoms, close observation is all that is usually required. Large volumes may require decompression by surgical means as a life saving measure. This particular patient was simply observed.

President's Pages



DID YOU KNOW?

That Title XIX is projected to have its monies dispensed in South Carolina as follows:

40% Hospitals
35% Nursing Homes
12% Drug Program
13% Physician & Dental fees, Laboratory fees, Home Health Services fees

In South Carolina the cost of Title XIX in 1968-1969 is to be $16,000,000. 19.5% or $3,120,000 will be state's share and 80.5% or $12,880,000 will be Federal share.

The cost in 1969-1970 is expected to be:

Total expenditures	$38,866,000
State's share 19.5%	7,578,500
Federal share 80.5%	31,287,500

This cost in 1969-1970 will provide medical service to 303,500 persons in families with income of $2,000 or less per annum.

It is projected that by 1975 almost half of the people in South Carolina will be receiving medical aid under Title XIX.

According to the report of the liaison committee of the South Carolina Medical Association to the State Department of Welfare under Title XIX the following benefits will be furnished:

1. Doctor's services, in or out of the hospital
2. Laboratory and x-ray services
3. Inpatient hospital services (The S. C. Plan provides for 40 days per calendar year in the hospital.)
4. Skilled Nursing Home services. (The S. C. Plan provides for 100 days care per year.) Services in institutions for tuberculosis and mental diseases are not covered under this act. They are under another category.
5. Outpatient hospital services
6. Drugs in accordance with an adopted formulary
7. Some emergency dental care
8. Home care visits—100 per year (will largely be made by Health Department nurses).
9. Ambulance if needed certified by physician
10. First three pints of blood will be provided if they cannot be replaced
11. Some rental of medical equipment if necessary

As this is being written the drug formulary has been published. This formulary was established by a committee of physicians and druggists, and it lists drugs which would be life saving or prevent hospitalization. It is expected that new drugs will have to be added to this list from time to time, and physicians may recommend new drugs by writing to Dr. Arthur Rivers, Director, Department of Welfare, P. O. Box 1520, Columbia, S. C. 29202.

In any new program there are always problems which arise and have to be worked out, and I feel that the implementation of Title XIX in South Carolina will be no different in this respect. A state medical advisory committee has been appointed by the Governor to advise the Department of Public Welfare and is to report back to that agency and not to any other State board or to any other agency.

Dr. Arthur Rivers, State Department of Public Welfare, has agreed to appear before any medical society, on request, to discuss and explain the Medicaid or Title XIX program in South Carolina.

Dr. Harriett Pinner, consultant to the Department of Public Welfare, furnished the figures used in this paper relative to costs and numbers of people involved in the Title XIX program.

Joel Wyman, M.D.

QUIDNUNC

In Teaching

"The **touch-of-mud** is psychologically sound. It forms the essence of most memory improvement courses, wherein the student is taught to associate the object or event to be remembered with some bizarre and unrelated word or phrase. It is the method many of us found useful in memorizing the carpal bones—Never Lower Tillie's Pants, Mother Might Come Home. The method stands condemned by educators because it de-emphasizes reasoning in favor of memorization. But, with the wisdom of cornered animals, medical students cling to such devices. They know the faculty rarely examines for ability to reason, but almost always for retention of facts."

J Kansas Med Soc 66:155

Editorials

House Calls

Scarcely a day goes by that someone does not bemoan the passing of the doctor who made house calls. Perhaps in some areas this is a justified regret. In our state there are no doubt a great many physicians, particularly specialists in various fields, who do not soil their feet on the doorsteps of their patients. However, it has been our impression that there are still a fairly good many survivors of the old school, who go when necessity calls and administer to patients who cannot readily or comfortably come to their offices.

To confirm this thought, we asked the past president of the South Carolina Chapter of the American Academy of General Practice to obtain information for us from the 400 members of the organization. We were happy to know that 40 per cent of the members replied (this is an usually good return from questionnaires) and everyone replied that he did make house calls. Perhaps those complaining patients of the hinterland might find it worthwhile to come to South Carolina for their medical attention.

Early and Formal Instruction in Sterile Technic

Modern technology has make possible a consistently high standard of sterile technic by practically eliminating contamination from material and environmental sources. However, this has not been generally realized because of a lack of corresponding improvement in the area of observance among members of the operating personnel. While there are contributing factors to this lax attitude, such as reliance upon antibiotics and distraction resulting from the exacting demands of new frontiers, the problem is psychological in nature and accordingly related to methods of instruction and indoctrination both as to cause and effect. Any sound solution must come through education.

Individual or small group instruction of a technical nature in preparation for the student to participate in an operation does not constitute an adequate basis for a broad concept of the subject. There should be a formal presentation before the student enters the operating room either as a participant or an observer. It is important that this be placed early in the curriculum because some students work in outlying hospitals during vacation periods. A poorly prepared student is a concern to an observant surgeon and a potential liability to the patient. Furthermore he is unable to discriminate, and in copying his seniors he perpetuates any faults they may possess.

The subject should be presented from a broad standpoint emphasizing the dual purpose of protecting the patient at hand and also subsequent ones by preventing cross contamination and the establishment of reservoirs of pathogenic microorganisms. Psychological as well as technical aspects should be considered. The subject is well suited for audiovisual presentation.

Given sound instruction and indoctrination the student is likely to be observant and discriminating, and as a physician assume his share of responsibility in maintaining a high standard of sterile technic.

William H. Prioleau, M.D.

THE RELICTS

By Robert Quinn, M.D.

Sooner the day than we had thought
The house will sit neat and straight,
My straitened heart will pause, distraught,
Awed by its ordered, silent state.
Glass and brass will lonely glisten,
Free of careless fingers door and lock
And we shall have time at last to listen
To the vacant vowels of the clock.

SOUTH CAROLINA MEDICAL ASSOCIATION
120th ANNUAL SESSION
HOUSE OF DELEGATES
NORMAN O. EADDY, M.D., Presiding
ABBREVIATED MINUTES OF THE MEETING (Continued)

May 14, 1968

Ocean Forest Hotel Myrtle Beach, S. C.

Dr. Cyril B. Rush: Mr. President, at the present time we have 83 members of the House of Delegates present.

Dr. John D. Gilland, Chairman: This is the report of the Reference Committee on Reports of Council and Officers.

This reference committee met and considered the following reports:

1. President's Address—This committee recommends the acceptance of the report of the President, Dr. Norman O. Eaddy, and wishes to commend and express appreciation on behalf of the South Carolina Medical Association for the diligent manner in which he has performed his duties. His sincere frankness and dedication have brought honor to our profession and our state and have been an inspiration to those who may follow in his footsteps. His gentle persistence has been a guiding light in the achievements of our Association. We hope he will continue to serve us.

2. President Elect—This committee endorses the report of President Elect Dr. Joel W. Wyman. We commend his attitude toward our system of free enterprise and concur with him in our becoming more active in politics so as to try to preserve the private practice of medicine as we know it today. We recommend that this House of Delegates assure him of its support and loyalty.

3. Executive Secretary—This committee recommends the acceptance of the report of our Executive Secretary, Mr. M. L. Meadors, and commends him for his continued interest and service rendered to our Association. His astute attention and ready communication to both sides of our legal problems in the state are well recognized. We are especially indebted to his Newsletter for keeping us abreast of current affairs.

4. Secretary—This committee recommends the acceptance of the report of Secretary, Dr. Ben N. Miller, and extend our appreciation for his long years of service and dedication.

5. Treasurer—The report of Treasurer, Dr. J. Howard Stokes, was reviewed with interest by this committee, and acceptance is recommended. His profitable operation is duly noted in this trying time of rising costs.

6. Editor of Journal—The report of the Editor of the Journal, Dr. Joe I. Waring, was received and we commend him for rejuvenating our Journal during his tenure. We urge the medical talent of our State to present their knowledge in the form of papers so that we may share their experiences through his publication.



Credentials Tallied

7. Report of Council—This committee accepts the report of Chairman of Council, Dr. William L. Perry, with the following recommendations:

(1) We recommend that the House of Delegates accept their suggestion that Myrtle Beach be designated as our convention site for the year 1969, 1970 and 1971.

We so move, sir.

The above motions were all passed in proper order.

(2) We take cognizance of Council's approval of the South Carolina Regional Medical Program for Heart Disease, Cancer and Stroke, and we recommend that Dr. Charles P. Summerall, III, present this plan for consideration by the House of Delegates, or, in view of its past controversial nature, a committee be appointed for further study.

(This motion was seconded and opened for discussion)

Dr. Davis Moise, Sumter, S. C.: This program is put on and financed by the Federal Government in all states of the United States and whether we participate or not in South Carolina the program will continue to go. Dr. Summerall and Dr. McCord

of the Medical College have done a tremendous amount of work to make this program in South Carolina the best program that it can possibly be, and realizing the funds coming from the Federal government and controlled by the Federal government are not what we would have ordered if we had our say about it. They have done a tremendous amount of work on this and they have done a good job and have programs going through this plan and I think it would undercut them if we did not approve the work they have done in this program.

I would like to move the program be accepted and that Dr. McCord and Dr. Summerall be given a vote of thanks.

Dr. Winston Y. Godwin, Chesterfield: Mr. President, I would like to have Dr. Summerall present the newer concepts of this program to the House of Delegates since it has so changed from the original concept. I think it would be a good idea for the Delegates to listen to him in this regard.

The Chair: Dr. Moise, would you mind withdrawing your motion until after we hear from Dr. Summerall? (This was agreed) If it is all right with you, then, we will vote on the motion, if someone cares to make it, that we grant Dr. Summerall the floor.

(This was moved and seconded)

Dr. Summerall: Mr. President, members of the House of Delegates, I very greatly appreciate this opportunity to present a brief discussion of the South Carolina Regional Medical Program. We have placed at your seats this morning a progress report describing the current status of this program in South Carolina. I would like to call your attention first to the inside front cover starting 89-239.

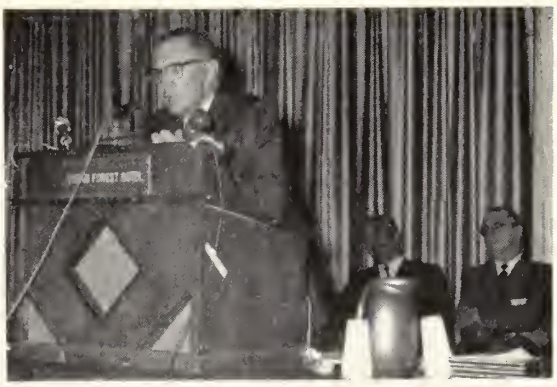
This program was initiated by legislation of Congress; passed in October of 1965. The legislation is very brief, it provides only a general outline for development of the program. It was not until June 1966 that program guidelines were actually published and distributed. The legislation states that the purpose of the program is through grants to support cooperative programs among medical schools, research institutions, physicians, public and voluntary health agencies to promote the care of patients with heart disease, cancer and stroke.

There are three sections, the first requires that each region, that each self-designated region, appoint an advisory committee of physicians, hospital administrators, representatives of Medical Schools, and voluntary and public health agencies.

The second section provides for planning grant to be awarded to such regions towards the outline of regional planning in their area relating to heart disease, cancer and stroke.

The third section applies to our operational grants for implementation of the programs planned under the regional program.

In South Carolina the regional advisory group was organized in April of 1966. Nominees to this advisory group were made by the State Board of Health, by the voluntary health organizations, by the Medical College. There are currently 67 members of this advisory group, 31 of them are practicing physicians, 8 of them are members of this House of Delegates. A president of the Medical Association has served as an ex-officio member of the plan. Planning has been carried out under the administrative control of the Medical College of South Carolina. The planning resulted in an operational grant application submitted to Washington in February of this year and currently in the process of review.



Chairman of Council Reports

The planning is not our style of planning—it is not the type of development that would be run from the Medical College. The planning has been decentralized. The program priorities, that are described in this folder, were established by study groups consisting of physicians, hospital representatives, nurses, allied health, professional representatives from around the state. The members of the study group were nominated by committees, placed geographically, on the medical business of the South Carolina Medical Association.

We feel very strongly this program would be rather meaningless without the support of the Medical Association. It is a program that needs the advice, the evaluation, the review and supervision by physicians in the state. It is a locally initiated program—it is not something that is ordained in Washington. If something were not done on a voluntary basis in South Carolina nothing would happen under the Regional Medical Program in South Carolina. I would like to underscore the word "voluntary". The physicians who have given their time to this program have not been reimbursed for it. We deeply appreciate the enormous donation of time and effort that physicians in South Carolina have given to what we feel is a very fortuitous initiation of a program directed for us in approved care for patients suffering with heart disease, cancer and stroke. Thank you very much.

The Chair: Thank you, Dr. Summerall

Dr. Gilland: Having heard Dr. Summerall the com-

mittee now recommends that this program be accepted and endorsed by this House of Delegates. I so move.

(This was seconded by Dr. William Hunter, of Anderson)

Dr. Robert Wilson: Regardless of what we do I think the program is probably going on. On the other hand, it has not been approved by the Charleston County Medical Society and I think that it is simply another step in state socialism. I can not vote for its approval. I remember what Dr. O'Driscoll used to say "We should remain the handmaiden of science and not become the chambermaid of the microscope." I think with the approval of this kind of thing we are simply going to become chambermaids of the federal government. I shall have to vote "no" on the motion before the House.

Dr. William Hunter, Anderson, S. C.: I happen to be on the state advisory committee and worked in my district on this particular program, as well, and having been with it from its inception it would perhaps be amiss if I didn't say just a word. There has been so very little that I have ever disagreed with with Dr. Wilson, that I feel a little awkward. But, I would like to say this—that many of us having concern, in the direction of our country and what is going on, initially thought in terms of States Rights and I think that even more of the Federal government people, now, are thinking in terms of States Rights and more decentralization of government; but yet all of us know that those rights have been taken away from us locally often because of failure of local people to assume those responsibilities that they should have. Now, I think that this program, it is true, is a federal government bill, this is very true, and there is nothing I am more afraid of, personally, than the federal government, itself. I think that is something we have to watch very closely and carefully but having been with this program from its inception I think it is a very good and worthwhile thing. I think it gives us a distinct opportunity to work locally and have this controlled by the State and by the physicians and this is what is being done with it. I will vote "yes", in favor of this. Thank you.

Dr. Tom Parker: I am Tom Parker from Greenville. I would simply like to make the statement that provided you spend enough money you are bound to help somebody and I have doubts that this program will help many people. I think, though, in this day and time our basis for measuring these things will have to be whether they are constitutional or not and I mean the Federal Constitution as intended by those who wrote it, because there are many ways to spend money and there are many people to be helped, as you know. I would have to support Dr. Wilson's position.

Dr. John Booker: I think I would have gone along with Tom Parker and Dr. Wilson until yesterday when this thing was explained to me. I had it confused with Appalachia, the Appalachia Program. Now, this, we are scared to death of in our own litle community. I have been assured this was a thing that would help the little hospitals and will help us secure training that we couldn't provide any other way, we could establish, in our own little hospital, specialized care and training for our personnel that we couldn't get in any other way and I would have to vote "yes" for it.

Dr. John Hawk, Charleston: I think in approving or disapproving of this program we should think in terms of what the original concept of the entire plan was because that is where it will go eventually, I think, without much question unless there is some change in the feeling of the Congress of the United States, and that is towards a concept—not as it has been expressed by Dr. Booker, primarily helping in smaller hospitals, but eventually the development of large regional centers. This is not what is in the bill at the present time, this is what is desired by those who promoted the original part of this. And I think that the history of legislation in the health field is that it goes a little bit at a time. When you get drawn into it, of course, you have many people fitted to it, it is awfully hard to withdraw your support. For this reason I am very dubious about this program at the present time. It was originally highly a planning program. When I discussed this with Dr. McCord and Dr. Summerall, previously, he reiterated to me this was not going to be anything but a planning program and that the only reason he was interested, he was interested in doing some planning of some projects that might be helpful but that this was not going to go into a direct federal financial support, as it is now. I have grave reservations about giving the support of the South Carolina Medical Association. Thank you.

Dr. Hunter: I think what Dr. Hawk said, generally, is very true and I think we all are aware of this, however, we must keep in mind that at present this thing that we all worry about is not in the bill—and yet I think it is wise that he brought it to our attention because this is something some of those planners and some of those officers no doubt are planning. But, whether it is done in this bill or in some other way they are going to plan it. Our own state medical college has been working and controlling the bill as it is. I say let's approve it as it is and keep in mind what Dr. Hawk has said this morning. Certainly if it goes to more and more taking this thing out of our own hands then we can do something about it. But John hit the nail on the head—it depends on the Congress—and if you want to do something about that and if you really want to contribute to keeping yourself from under the thumb of the Federal Government controlling you and your patients' welfare in the future, I think what we had better do is do what Dr. Hoyt Gardner said last night—contribute $100 a year to SCALPEL; contribute $10.00 a quarter of your time

to politics, either party or the other, but get into it and involved and elect those people to the Congress that won't permit this to happen.

(From the Floor) A call was made for a division, which was carried out.

Dr. Hush (Counting) Seventy-four (74) for—twenty (20) against.

Dr. Gilland (Continuing Reference Committee Report)

"8. We recommend approval of the reports of our Delegates to the Annual and Clinical meetings of the A.M.A., Drs. George Dean Johnson and Joseph P. Cain, Jr., and thank them for bringing us the fruits of their labors. We sincerely appreciate the past 14 years of service of Dr. Johnson thus exemplifying his love for the medical profession."

(This was seconded, and passed.)

The entire report as amended by this House of Delegates was adopted.

Reference Committee on Legislation and Public Relations—Dr. Harold Gilmore, Chairman.

Dr. Harold Gilmore: I wish to thank Dr. Robert Solomon, Dr. Guy C. Heyl and Dr. J. F. Graves for their presence on this committee.

Resolution No. 9. Revision of State Board of Health.

Your Reference Committee appreciated the interest shown by many regarding this proposal. There was spirited debate both pro and con—each side presenting pertinent information in attempting to resolve the problem.

After due deliberation it was the judgment of your Reference Committee that more time and study should be given to this important and far-reaching problem. Therefore, the Committee recommends that a committee be appointed by Council to study this proposal and report back to Council its recommendations in time for Council to make proper recommendations to the House of Delegates at the Annual Meeting of the Association in 1969.

(Motion passed.)

Resolution No. 14. Spartanburg Delegation—Red Cross First Aid Training.

Your Reference Committee accepted the resolution and recommended that the whole program be publicized to the members of the State Association.

(Motion seconded and passed.)

Report of the Legislative Committee

As concerns the Report of the Legislative Committee, most of the items have been brought up-to-date in the report of Mr. Meadors.

1. Osteopathy—because of the report brought to the Legislature the Osteopathy question has been laid aside for this year.
2. Through the efforts of Dr. Frank Owens the problems of blood transfusion being a merchantable product has been changed to a medical service.
3. S 737 preventing advertising by professional men was introduced into the Senate but, as we heard from Mr. Meadors, has met with strong and vocal opposition from chiropractors and a radio-television station. It was felt that this bill should not be pushed by our Association this year.

(Motion seconded, voted on and passed.)

4. The special committee headed by Dr. Hilla Sheriff to study the needs of the new Abortion-Sterilization Law was considered and it is recommended that this Committee be divided into two committees—one to study the problems of abortions and the other to study the problems of sterilizations. That the committees work out problems and present recommendations to the Association next year.

(This was seconded, and passed.)

Report of Liaison Committee to Title XIX

This report was accepted by your Reference Committee with the recommendation that since the formation of the Advisory Committee to the Department of Public Welfare on Title XIX, as appointed by the Governor, covers all categories covered by the Liaison Committee, that the Liaison Committee be discontinued. And further, that recommendations be made to the Advisory Committee before submitting them to the Legislature.

Committee on Public Relations

(Seconded, voted on and passed.)

This report was received as information. However, your Reference Committee wishes to commend this Committee for its work and to encourage it in continuing the Annual Conference of County Medical Society Officers, the dissemination of insurance information to senior medical students at the Medical College of South Carolina, and the weekly newspaper articles on health.

(Seconded, and passed.)

Resolutions on Direct Billing under Medicaid

Your Reference Committee approved the resolutions that the South Carolina Medical Association recommend that Medicaid regulations in South Carolina be amended so that direct billing of private patients under the Medicaid program be permitted in accordance with Federal Law and that the South Carolina Medical Association shall petition the South Carolina General Assembly to effect this change in the Medicaid Program in this State."

Mr. Chairman, I move the adoption of this report in its entirety.

(This was seconded and passed.)

The Chair: Thank you very much, Dr. Gilmore, you and your committee.

At this time could we hear from the Reference Committee on Public and Industrial Health, Dr. Hugh Wells, Chairman.

Dr. Hugh Wells: Your reference committee conducted hearings at 3:00 p.m. on Monday afternoon on Committee Reports and resolutions presented. I would like to take this opportunity to thank the members of my committee as well as those ap-

pearing in the interest of the resolutions submitted.

A—Report of Sub-committee on Alcoholism and Drug Addiction (sub-committee of the Cooperative Activities Committee) this report was published in the Journal and the Reference Committe wishes to commend this committee for its work. The Reference Committee supports the recommendation that a crown tax be established to build an acute alcoholic treatment center. The feasibility of utilizing a portion of State Park as an acute alcoholic center, on a temporary basis, should be studied.

The committee moves the adoption of this recommendation. (Passed)

B—Report of Committee on Mental Health, as printed in the Journal.

The committee accepts the report as published.

C—Report of Committee on Maternal Mortality. This report was published in the February issue of the Journal of the S. C. Medical Association and is accepted as information.

D—Committee on Mental Retardation. No report submitted. We particularly appreciate the brevity of the report of this committee.

E—Report of Committee on Industrial Medicine. The committee is to be commended for its work on fee schedules as submitted to physicians in January 1968. The new fee schedules have been widely accepted by the medical profession as well as the Industrial Commisison. Committee members plan to establish a liaison committee with the Industrial Commission for the continued benefit of this Association. We urge and support such a program and recommend its adoption by the House of Delegates. (Seconded and passed)

F—Report of Executive Committee of the State Board of Health. This report has been published in detail in the Journal but the reference committee wishes to bring to your particular attention certain aspects of this report.

1. Family Planning—the citizens of South Carolina as well as the medical profession are deeply indebted to the State Board of Health for its vision in establishing such a program.
2. We endorse the comprehensive health planning done by this committee and commend them in their stand on maintaining the private practice of medicine, dentistry and related healing arts.
3. Your reference committee urges the consideration of further study and planning to submit to the South Carolina Legislature a recommendation for revising and up-dating our state laws on abortion and sterilization.
4. We wish to take note of the fact that no cases of polio were reported in South Carolina in 1967 and we urge the support of our profession in the program of measles prevention.
5. We recommend to the State Board of Health that the same minute and detailed inspection, given our schools and hospitals, be used in examining and grading our restaurants and cafes.

G—Resolution presented to the House of Delegates by the Committee on Alcoholism and Drug Addiction. We submit the following recommendations with certain amendments:

1. That rules, regulations and by-laws of said hospitals be amended to allow admission and treatment of alcoholics.
2. That patients suffering from alcoholism be admitted for treatment and care at the request of their physician or service.
3. That the South Carolina Insurance Commission be urged to earnestly solicit the cooperation of all carriers of hospitalization, health and accident insurance in the State of South Carolina, to include a coverage afforded by them, treatment for acute alcoholism (and this is the change.) That chronic alcoholism be covered within the limitations of accepted insurance principles. It is the feeling of the committee that insurance rates should not be raised to the non-drinker to cover chronic alcoholism."

(The original resolution, before suggested change, read as follows):

3. That the South Carolina Insurance Commission be urged to earnestly solicit the cooperation of all carriers of hospitalization, health and accident insurance in the State of South Carolina to include in coverage afforded by them treatment for acute and chronic alcoholism as a basic coverage.
5. That the physicians of the South Carolina Medical Association utilize, where applicable, the diagnosis of alcoholism in order that the patient may avail himself of insurance coverage." But, at the same time your committee feels that a program of education will be necessary in order to protect the patient's rights, as well as his job and financial security."

Mr. Chairman, we move the adoption of these resolutions as amended.

Dr. Joseph P. Cain: I have a question—When does chronic alcoholism become acute?

The Chair: Are there any alcohol experts in the field? Dr. Ball says we are all experts. (laughter) What is alcohol?

Dr. Wells (Reference Committee Chairman): The question, really sir, borders on the fact that we felt chronic alcoholism, as chronic mental disease, could be a very long-term situation and we felt this may increase our insurance rates or premiums considerably. Specifically, we thought this was an insurance program and we were not really in a position to make a recommendation to the insurance carrier.

Dr. Sawyer, Gaffney, S. C. (Recognized): I some how or other feel this is not my business—on the other hand alcoholism is a chronic disease and alcoholics in this State are largely going untreated

because nobody knows what to do with them in general except to send them to the State Hospital in Columbia which institution feels they are not prepared nor financed to have this particular patient. It seems to me this Reference Committee at the present time is taking the position of further deferring action on what to do with the alcoholics in the State of South Carolina.

Dr. Wells (Chairman of Reference Committee): I would like to disagree with the comment as made. We recommended, sir, that immediate consideration be given to using a wing at the State Park which is now under study for chronic respiratory diseases; that the immediate study of this be made upon a temporary basis until such time as finances can be established to build an acute alcoholic center. Our understanding—Dr. Aycock, will you expound on this to enlighten us a little bit about this, doctor?

Dr. Kenneth Aycock, Columbia, S. C.: I don't know how well I can expound on this. The recent legislation was enacted transferring the department from State Park to the State Board of Health. As Dr. Wells pointed out the tuberculosis control program at the State Park will be under the primary perusal of the tuberculosis control program of the State Board of Health and the program will be enlarged to include all heart and respiratory diseases. It is our hope that the State Park will be brought back into the mainsteram of the medical care for South Carolina filling many health needs we now have. And Dr. Wells has recommended that a part of the building be used for hospitalization of alcoholics for the treatment of alcoholism. I would think this should be studied in some depth and by people more learned than I am. I am sure that they could possibly work out some arrangement with Dr. Hall. We have very close working relationship with him and that perhaps he would consider using his facilities. I am reluctant to think that we, the State Board of Health, would have the personnel, the physicians to treat the acute alcoholic but as I say with Dr. Hall's cooperation this might be feasible. But he is recommending a study be undertaken and I would welcome the study. I think the executive committee will do, as well as the advisory committee on Tuberculosis Control, which the Governor will appoint,—I would imagine they would be happy to study this, too.

(Question—Dr. Wells): Is it not also true, Dr. Aycock, the possibility of a hospital as a part of the mental health unit is now under consideration for a permanent solution to the alcoholic problem?

Dr. Aycock: There has been some discussion on this—Dr. Macdonald could answer this better than I. It is my understanding they are going to open 30 beds a tthe William S. Hall Institution for the emergency treatment of alcoholics. When this will come about, I don't know.

(Question by Dr. Wells): Is it not also true that there is some study of a 140 bed hospital for the mental health division for alcoholics?

Dr. Robert S. Solomon: The problem is if we have 1000 beds we would not be able to take care of the alcoholics because there is one out of 15 of us. But, be that as it may, the intent of the resolution was to make available, in our general hospitals, rooms, space available for the treatment of the acute alcoholic, that is the acute detoxification of the patient, and the long range treatment of the chronic alcoholic. Our present facilities now are available at the Palmetto Center and has approximately 40 beds and another 20 beds added on. This is run by the vocational rehabilitation service.

If the Legislature votes for an amendment to the Constitution in November of this year, as we hope will come to pass, why one crown tax will be levied over and above the alcohol tax which now all goes to our educational fund. One penny per 8-ounces, based on the 1966 sales of alcoholic beverages, will amount to a little over One Million Dollars a yar. This money is intended to be used for the construction of a 44 bed unit in Columbia that will be used for the involuntary alcoholic with the idea of having an acute detoxification center at this hospital. Dr. Hall and the Mental Health people will run this installation. Palmetto Center will continue to be run by the Vocational Rehabilitation.

One of the other problems involved is the coming decision of the Supreme Court in the Easter Drivers' decision where the chronic alcoholic is no longer going to be able to be dried out in jails. We of the medical profession have to face up to the disease identity of alcoholism and it is our obligation to treat these people and to treat them in our general hospitals. This is the intent of this resolution and I solicit your support for the entire association. I thank you.

Dr. M. H. Wyman, Columbia: I have been coming to these meetings since 1910, many of you boys know me. I believe you have got to learn to talk to the Lord and persuade these people, these alcoholics, be they chronic or acute, probably the chronic ones; you can get better understanding talking to the Lord and I think the thing to do is not be preaching, necessarily, but setting an example for them. I advise my patients not to ask the Lord to cure you of the disease but to prove to you that he is listening. How are you going to know when the Lord is listening to you? I advise my patients to ask the Lord to take away that desire. If you have lost the desire to smoke or drink you can tell it pretty soon because you know how it is otherwise. I believe the doctor has got to do a little bit more of that conversation with their patients and conversation with the Lord to listen to these patients. Try it. I would be glad to see you do it. I have been coming since 1910.

The Chair: Thank you, Dr. Wyman. Is there any further discussion? (The vote for the resolution was unanimous)

H. Resolution (No. 3—Dr. Ford McIver) to establish a register for patients with Down's Syndrome (Mongolism)

The committee recommends adoption of this resolution as presented.

I. Resolution (No. 6—Dr. Booker) from the Oconee County Medical Society concerning Hospital Inspection.

It is our understanding that this grievance has been referred to the Hospital Advisory Council for their recommendation to the Executive Committee of the State Board of Health. Although we agree with the resolution in principle concerning the investigation of medical records by lay personnel, we feel it advisable to await action of the Executive Committee of the State Board of Health.

(Seconded, and passed.)

J. Resolution (No. 7—Dr. Booker) from the Oconee County Medical Society regarding Vocational Rehabilitation.

a. Be it resolved that the South Carolina Medical Association recommend to the S. C. Legislature, and any other appropriate State Agencies concerned, that "Financial Need" as determined by reasonable and current standards be included as a criterion, along with physical disability, to entitle a recipient to assistance under the Vocational Rehabilitation Program.

(This motion was seconded and passed)

b. Be it resolved that applicants for assistance under the Vocational Rehabilitation Program continue to be examined by their family physician who, in turn, may request consultation as necessary or desired.

(This motion was seconded and passed.)

c. Be it resolved, that surgical and medical procedures authorized and sponsored by the Vocational Rehabilitation Commission, when performed in an accredited hospital with a surgical service approved and accredited by the Joint Commission on Accreditation of the AMA, that such accreditation be an acceptable standard for the approval of the medical and surgical services rendered. That non-accredited hospitals, previously accepted by the Vocational Rehabilitation Commission, continue to render treatment, but we recommend that these hospitals make every effort to be accredited in the immediate future.

(This motion was seconded and passed.)

I. BE IT RESOLVED, that the Committee recommends to the governing body of the South Carolina Medical Association that it adopt a resolution recommending to the South Carolina State Legislature and any other appropriate state agencies concerned, that "financial need", as determined by reasonable and current standards, be included as a criterion, along with physical disability, to entitle a recipient to assistance under the Vocational Rehabilitation Program as pertains to financial assistance to the handicapped.

II. BE IT RESOLVED, that this Committee recommend to the governing body of the South Carolina Medical Association that it adopt a resolution recommending to the South Carolina Legislature and other appropriate state agencies, a policy requiring that any applicant for assistance under the Vocational Rehabilitation Program be examined by a physician, preferably one specializing in the field of the applicant's disability, who shall certify the nature and extent of the applicant's disability, and further that such physician preferrably be one other than the family physician of the applicant and that the costs of such independent examination be borne by the appropriate agency handling Vocational Rehabilitation Programs.

III. BE IT RESOLVED, THAT SURGICAL PROCEDURES AUTHORIZED, sponsored and paid for by the Vocational Rehabilitation Program be performed in an accredited hospital with a surgical service approved and accredited by the Joint Commission on Accreditation of the American Medical Association and that such accreditation be the sole standard for the approval of the medical and surgical services to be performed under the Vocational Rehabilitation Program."

K. Resolution of the Columbia Medical Society, presented by Dr. Slocum, concerning Water Pollution.

Our committee moved the adoption of the resolution as presented.

(Seconded and passed.)

L. The reference Committee on Public & Industrial Health feels it may be exceeding its responsibility but we would like to commend the work of Dr. Frank C. Owens, not only for his work on the Committee for Selective Service but for his influence and dedication to his profession as Senator from Richland County. We urge that all physicians become politically conscious and assert their influence on the local, state and national scene. For those who are politically inclined we especially urge their consideration to enter the active field of politics.

(Seconded and passed in its entirety.)

Dr. Davis Moise: Report of the committee on Constitution and By-laws.

The meeting was called to consider the Resolution to amend the Constitution, as follows:

"Resolved that the Constitution and By-Laws be amended so that only the five most immediate past presidents be members of the House of Delegates with the privilege of voting. Any past president may have the privilege of the floor of the House of Delegates."

Appearing before the committee were Dr. Mayer, who spoke eloquently against the amendment, and Dr. R. L. Crawford and Dr. W. R. Wallace, who

spoke against the amendment. Dr. Tucker Weston appeared and presented the opinion of the Columbia delegation in favor of the amendment. Interested guests who appeared were Dr. William Hunter and Dr. Appleby. Neither expressed an opinion.

After careful consideration, the committee unanimously recommends to the House of Delegates that this amendment not be passed.

(Through error, this amendment to the Constitution and By-laws which had lain on the table for a year, was referred to the Reference Committee on Amendments to Constitution and By-Laws. This constitutional amendment would only be voted upon by the House of Delegates and needed no consideration by a reference Committee.)

(Upon request the Chairman, Dr. Moise, withdrew his recommendation of his committee.)

At this time we will hear from the Chairman of the Reference Committee on Insurance, Blue Cross and Blue Shield, Dr. R. W. LaRoche.

Mr. President, Members of the House of Delegates:

Two Resolutions relative to this committee were considered, the full committee being present. It is to be pointed out there were no representatives present who favored these resolutions: however, their absence in no way affected the committee in its deliberations.

Resolution No. 1. Blue Shield acting as a Private Business in the State of South Carolina.

This resolution requests the Association to withdraw as the corporate body of the Blue Shield Corporation, if, in the opinion of the legal advisor of the State Association, this is in fact the case, and as long as withdrawal is accomplished without injury to the present policy holders, or without compromising their health coverage in any way.

Those who spoke against the resolution pointed out the following pertinent facts:

a The new South Carolina Law would subject Blue Cross-Blue Shield to tax, but the rates and receipts are subject to the South Carolina Insurance Commission.

b. The organization cannot be a profit organization as long as it is a member of the National Blue Cross, or, its governing rules. Droppage would not change anything. Blue Cross and Blue Shield will be taxed "about 2%" but not to exceed 5% of the operating gain as long as operating Blue Shield.

c. The reserve would eventually lead to reduction of premiums and/or upgrading payments.

d. Legal counsel gave the opinion the Company is not a private corporation. "The definition of private meaning to make money for the stock holders." The effect of the new law cannot be determined at this time. It was further noted Blue Shield, to exist, must have the official support of organized medicine.

Mr. President, your reference committee recommends a negative vote on Resolution No. 1. (Seconded and passed.)

This resolution was considered in two parts, due to its presentation. Part No. 1 was to the effect the rider does not offer any reduction in premiums, is not added with the insured's permission, and is a unilateral dictum rather than agreement. Those speaking relative to this portion of the resolution indicated this applies only to Blue Cross, and the situation is not a matter of Blue Cross' choosing. It is demanded by large firms. Also, experience has been that the primary pay-off is subject to full payments and this has prompted this plan. If covered by two or more group companies, the payments would be pro-rated shares of the bill. Without such clause, Blue Cross would pay the primary bill up to 100% of its coverage with the commercial companies taking up the balance. Also, the benefits rider applies only to group companies.

Blue Cross contracts state the contract may be amended with thirty days notice.

Mr. President, your reference committee recommends a negative vote on this portion of the resolution.

Dr. John Hawk, Charleston: I think the problem that concerns people has to do with two members of the family both of whom work and both of whom belong to a group. After reading this rider—not just once or twice but three or four times, there certainly seems to be some good logic in that this will help hold down the over-all premium cost for people in both groups. This is a sort of nebulous thing, but it is well if we do not have duplication in coverage. However, for the individual who belongs—the husband to one group and the wife to another group—he has and she has the benefits reduced without a reduction in the premium for themselves. Granted there may be a minute reduction in premiums over a period of the next 10 years, as we have indicated, etc., but this does not give a means for someone who has belonged to a group that does not give quite full coverage—and, of course, they want to have full coverage, both members of the family, and they have no adjustment in the premiums, for the individual. I believe this is one of the main reasons for this. I don't know whether this was ansewered in the committee meeting. I am sorry that we could not be there. We talked in other committees, we can't be in two places at one time, so all of us were speaking in other reference committees.

Dr. LaRoche: The Reference Committee recommends a negative vote on this portion of the resolution, on Part No. 1.

That is to the effect the rider does not offer any reduction in premiums, is not added with the insured's permission, and is a unilateral dictum rather than agreement. Those speaking relative to this portion of the resolution indicated this applies only to Blue Cross, and the situation is not a matter

of Blue Cross' choosing.

This was pretty well covered by Mr. Sandow—this policy has been demanded to be included by the large firms and, according to him, almost, with very few exceptions, all large firms do have the policy. The prompting of Blue Cross again was due to the fact that Blue Cross would be the primary agent and they would be paying 100% while the others would be taking up only the balance of payment. At any rate, if covered by two or more group companies, the payments would be pro-rated shares of the bill. Without this clause, Blue Cross would pay the primary bill up to 100% of its coverage while the commercial companies would be taking up the balance.

Dr. Eddie Parker: This is a very complicated subject, insurance. It is a very important matter to our patients who pay premiums to get paid and don't get a penny.

Mr. Chairman, if it is in order, I believe a substitute motion would be desirable here—to refer this to a committee appointed by Council, to study and come out with an applicable solution. As it stands now, it is not fair. If you want to carry more than one insurance policy then you ought to have the right to do so but if the insurance companies are not going to pay off, in full, then the premiums ought to be refunded, and they are not at the present time.

Therefore, I move a substitute motion that this matter be referred to a committee, appointed by Council, for further study and report at the next meeting of the House of Delegates.

Dr. Parker: I move that this matter be referred to a committee, to be appointed by Council and report at the next meeting of the House of Delegates with a recommendation.

(This was seconded by Dr. Hunter)

The Chair: We are voting now or discussing now a substitute motion. The ayes have it and it is so ordered.

Dr. LaRoche (Chirman, Ref. Committee on Insurance, Blue Cross-Blue Shield) continuing report.

"Part No. 2 of the Resolution is to request the South Carolina Insurance Commission to restrict the practice of "coordination of benefits" unless the insured is refunded a portion of his premium, since he had a reduction in benefits; to request the prohibition of insurance carriers from selling policies and collecting premiums on duplicating family insurance plans unless they pay full benefits according to their scheduled benefit plan. Lastly, that hospital sponsorship agreement is an invasion of the patient's privacy, and is not a part of the hospital administrative duties; that the coordination of benefits is the business of the insurance companies in their relationship to the policy holders.

Discussion of this portion of the resolution (part 2) pointed out the fact the rider has been approved by the South Carolina Insurance Commission, that it will eventually lead to a premium reduction, and that all insurance companies, with rare exceptions, have this benefit. Further, the hospital is merely offering a service. It was noted Blue Cross adopted the rider to protect itself.

Mr. President, your reference committee recommends a negative vote on this portion of the Resolution.

Dr. Joe Cain, Jr., (Recognized): Mr. President, since this is a further phase of the same problem it seems to me we would do well to study this phase of it along with the first part and I would like to make a substitute motion to the effect that this phase, also, be studied by the committee in lieu of the Reference Committee's report.

(This was seconded and carried.)

The Chair: We voted then whether or not to accept the substitute motion, which some might feel is just tantamount to voting to entertain the motion. To make it final and complete, we will vote on the motion again. Those in favor of Dr. Cain's substitute motion now, to close the matter vote "aye". Opposed "no" (There were several "noes".) The motion was carried.

Dr. LaRoche (Continuing report):

The Reference Committee reviewed the report of the Mediation Committee and Medical Specialties Consultants as published in the Journal of the South Carolina Medical Association, April, 1968. The report was accepted as information and Mr. President, your committee recommends this report be adopted.

(Seconded and passed.)

Mr. President, this concludes the report of Committee No. 5, Insurance, Blue Cross-Blue Shield, and I move that this report be adopted except for the changes as indicated.

(This was seconded, the vote was taken and it was so ordered.)

The Chair: We will now hear from the Committee on Miscellaneous Business, Dr. W. Marshall Bennett, Chairman.

1. Resolution 4-b—Cost of Hospitalization—Dr. J. C. Hawk.

Dr. Hawk met with the committee and thoroughly explained the Resolutions. All the Resolutions were unanimously recommended for adoption.

The Chair: Is there any discussion? (There was none, the vote was taken and it was so ordered.)

Dr. Bennett (Continuing Report):

2. Resolution 4-c—Practice of Medicine—Dr. Boniface

The reference committee recommends adoption of this Resolution. The committee recommends an active committee under this resolution which can work with other committees of similar nature, and/or to take the place of some of the other committees which are inactive.

(This was seconded and passed.)

3. Resolution—Commendation of Senator Thurmond—Dr. Ball—

The committee recommends approval of this resolution with the exception of paragraph 2. It is not a proven fact that Wilbur J. Cohen is a major

proponent for the establishment of National Socialized Medicine in the United States, and the South Carolina State Medical Association should not go on record as making that statement.

We omit then, paragraph 2.

(This motion was seconded and passed.)

4. Resolution No. 2—Anderson County AMPAC & SCALPEL—Dr. Hunter

This resolution is unanimously approved by the Committee.

(Seconded and passed.)

5. Resolution No. 11—Doctors on Hospital Boards—Horry County, Dr. Gilland.

This resolution is unanimously approved by the Committee.

(Seconded and passed.)

6. Resolution No. 12—Automobile Expense Tax Deductions—Dr. Hendrix, Spartanburg

The Committee unanimously approves this Resolution.

The Committee expressed an opinion that Councilors obtain proper legal advice concerning this resolution, and if legally permissible, to advise the Delegates to the AMA to submit this resolution to proper authorities.

Seconded, and passed.)

7. Resolution No. 13—Marchers—Dr. William Weston

The committee was divided on this resolution. The committee did not find that it was qualified to discuss this resolution. Due to the passage of so many "Civil Rights" laws, it is questionable if the House of Representatives, the Senate, or even the Governors can legally stop these marches.

(This was seconded)

The Chair: I am sure that will pass, if no objection I will accept it.

8. Committee reports as printed in the Journal of the South Carolina Medical Association:

(1) **Cooperative Activities Committee**—This committee accepts the report as information.

(Seconded and passed.)

(2) **Advisory Committee to Crippled Children**—This committee recommends that this committee be continued.

(Seconded and passed.)

(3) **Historical Medicine**—This committee recommends that this committee continue to function.

(Seconded and passed.)

(4) **Advisory Committee to Department of Public Welfare**—This committee recommends that this committee became active and work with the Welfare Department in its operation of Title XIX (Medicaid). We also recommend that this committee work with or be incorporated with the committee as proposed by Dr. Boniface in Resolution No. 4C.

(Motion seconded and passed.)

(5) **Advisory Committee to Vocational Rehabilitation**—The committee recommends that this Advisory Committee continue functioning with Dr. Ben N. Miller as chairman.

(6) **Mediation Committee**—This report was accepted as information.

(7) **Medical Services Committee**—This report accepted as information.

(8) **Selective Service**—Printed material accepted as information by committee.

(9) **State Board of Medical Examiners**—Committee accepted report as information.

W. M. Bennett, M.D., Chairman
Committee on Miscellaneous Business.

The Chair: Dr. Bennett we thank you very much, you and your committee. Are you willing to adopt this report as a whole?

(Vote taken and passed.)

(N. B. Dr. Bennett's Reference Committee report on Miscellaneous Business contained one other report, as follows, which he did not read. It is believed that the business had been handled by the Reference Committee on Reports of Council and Officers, and for that reason he omitted this.

"Report of American Medical Association House of Delegates—The committee accepts the report as information and commends the Delegates for a job well done.")

Now, gentlemen, if there is no objection, while we are all here we will interrupt the procedure just a minute to discuss and vote on this amendment to the Constitution and By-Laws.

This has nothing to do with any committee report, we have finished with the committee reports. If I make any mistake here I will ask our parliamentarian, who I have requested to sit here all through this meeting, to correct me.

(After tally of the votes by secret ballot) Gentlemen, it would have required 76 "yes" votes to amend the Constitution and only 54 voted "yes". So, the motion to amend the Constitution did not pass.

We will have a ten minute recess.

ELECTION OF OFFICERS—

Nomination, President-Elect, Dr. Clay W. Evatt, by Dr. Eddie Parker.

ELECTION OF OFFICERS:

Joel W. Wyman, President; William L. Perry, President-Elect; C. Tucker Weston, Vice-President; Strother Pope, Secretary; J. Howard Stokes, Treasurer.

COUNCILORS:

Clay Evatt, 1st District; Waitus Tanner, 2nd District; Martin Teague, 3rd District; J. P. Booker, 4th District, Chairman; John N. Gaston, 5th District; J. D. Gilland, 6th District; Michael Holmes, 7th District; J. Harvey Atwall, 8th District; Harold P. Hope, 9th District.

DELEGATES TO AMA:

Thomas Parker, Joseph P. Cain Jr.

ALTERNATES:

Harrison Peeples, John Hawk.

The Chair: Dr. Evatt is recognized.

Dr. Clay W. Evatt, Sr., Charleston, S. C. I just



Perry Becomes President-Elect



Citations Are Presented

want, first of all, to congratulate you ladies and gentlemen on having the man, who was just elected, as President-Elect. He is a wonderful man, a capable man and he is going to do a wonderful job and anything I, or any of my friends, can do we will do to help him. Second and most of all, I want to congratulate him on being leader of the nicest bunch of men, the nicest group of men, the best bunch of people I have ever associated with—and I have associated with all kinds and strata, the high and low and all in between, and the doctors to my mind, as time goes on, they have to my mind and to my heart meant a whole lot more than some of these others and I just congratulate each, both ways. Thank you. (Applause, long and loud as the entire House stands.)

Dr. Ben Miller: I have engraved certificates for you doctors, Dr. Norman O. Eaddy, this certificate indicates (reading)

Norman O. Eaddy, M.D.
Councilor, Seventh District 1961-1966
Chairman of Council 1964-1966
President-Elect 1966-1967
President 1967-1968

John Hawk, Jr., M.D.
Vice-President 1966-1967

Roderick Macdonald, M.D.
Councilor, Fifth District 1937-1948 and 1963-1967
Chairman of Council 1947-1949
President Elect 1949-1949
President 1949-1950

W. Wyman King, Sr., M.D.
Vice-President 1955-1956
Councilor, Second District 1964-1967

Joseph D. Thomas, M.D.
Councilor, Eighth District 1961-1967

Ben N. Miller, M.D.
Secretary 1961-1968

ANNOUNCEMENT OF ELECTION RETURNS—MEDIATION COMMITTEE

On the Mediation Committee:
1st District—Dr. Robert S. Solomon, Moncks Corner
3rd District—Dr. Gordon Able, Newberry
6th District—Dr. Swift Black, Dillon
9th District—Dr. W. A. Wallace, Spartanburg

We have already decided on the meeting place and the time, is there a motion that we adjourn? We are adjourned.



From right to left are the new officers of the Woman's Auxiliary. They are Mrs. Thomas Parker, Mrs. Julian T. Buxton Jr., Mrs. Peter C. Gazes, Mrs. W. L. McDoew, and Mrs. J. Ray Ivester. (Photo by Powell)



Dr. B. C. Blakeney has begun the practice of medicine in Pageland. He is associated with **Dr. D. C. Griggs.** Dr. Blakeney was graduated from the Medical College of South Carolina and interned at Greenville General Hospital. **Dr. Bernard Lapidus** of Columbia has become the first full-time medical consultant employed by the S. C. Vocational Rehabilitation Department. He assumed his duties August 1. **Dr. John Rhodes Haverty** of Greenville has been approved by the Georgia State College's board of regents as the first dean of the new School of Allied Health Sciences. Dr. Haverty was graduated from Princeton University and the Medical College of Georgia and began private practice in Atlanta in 1957. He is a diplomate of the American Board of Pediatrics. **Dr. Harold S. Gilmore** of Nichols and **Dr. Harold E. Jervey Jr.** of Columbia have been renamed to four-year terms on the Board of Medical Examiners. **Dr. J. Richard Allison** of Columbia replaces **Dr. Lawrence V. Jowers** on the Board of Examiners and Registration of Nurses. **Dr. W. L. Byerly** of Hartsville was honored this summer by the Loyal Order of Moose in South Carolina. **Dr. W. Campbell McLain Jr.** has moved his practice in internal medicine and cardiology from Columbia to Beaufort. He has opened his office at 3 Dowling Loop. He was graduated from Duke University School of Medicine where he later received special training in internal medicine. He interned at Long Island College Hospital and served his residency at the Veterans Hospital in Columbia. He is a diplomate of the American Board of Internal Medicine. **Dr. Hal Cecil Anderson** has become associated with **Dr. William Benjamin Ardrey III** in the practice of pediatrics in Rock Hill. **Dr. Herbert A. Moskow** has moved his office to 1045 South Palmetto Avenue in Denmark.

Dr. James B. Causey has opened the practice of general medicine and surgery in association with **Dr. C. Pulaski Jr.** at 410 Jackson St., Hampton. He was graduated from the Medical College of South Carolina, where he served his internship and later completed a year of special study in internal medicine. **Dr. Norman S. Walsh,** who was discharged from the U. S. Air Force recently, has entered the practice of general surgery with **Dr. Douglas C. Appleby** at 315 Calhoun Street, Charleston. He is a son of **Dr. J. Norman Walsh** of Pinopolis. A graduate of the University of the South and the Medical College of South Carolina, Dr. Walsh served his internship and residency at the Medical College Hospital. **Dr. Donald Kenneth Freeman Jr.** has assumed his duties as child psychiatrist at the Anderson-Oconee-Pickens Mental Health Center in Anderson. He is also director of student Mental Health Services at Clemson University. **Dr. Melvin G. Baynard** has begun the practice of general surgery in Barnwell. He has been in Lexington, Georgia at the Oglethorpe County Medical Center. Dr. Baynard is a native of Emporia, Va.

Dr. Joseph Goodman of North Charleston has been made medical director of research for Raybestos Corp. He has also been appointed clinical instructor in Preventive Medicine at the Medical College of South Carolina. **Dr. J. Carroll Chambers** has been appointed to the southeast regional committee of the American Social Health Assn. **Dr. Charles L. Hall** has joined **Dr. Jackson Wood** and **Dr. William Roche** in the general practice of medicine

in Greenwood. **Dr. W. L. Heaner** who has practiced medicine in Orangeburg since 1911, was presented a plaque for having been selected Woodman of Year this summer. **Dr. Robert James**, a neurosurgeon formerly practicing in Princeton, N. J., has moved to Anderson. He was graduated from Princeton University and the University of Maryland Medical School. His internship and residency were served at Lahey Clinic, University of Maryland and at Queens Square National Hospital in London. **Dr. Robert L. Galphin Jr.** has been promoted and appointed to the position of chief of the medical service at the Veterans Administration Hospital in Charleston. **Dr. J. H. Young** of Anderson has become a member of the Erskine College Board of Trustees. **Dr. J. Kenneth Stokes**, formerly of Newberry, has recently joined **Dr. Richard M. Christian** and **Dr. M. Rodney Culler** in their practice of internal medicine in Greenwood. **Miss Beulah L. Gardner, R.N.**, and **Dr. Glenn B. Carrigan** were honored this summer for many years of service to the S. C. Department of Mental Health. **Dr. J. Burr Piggott Jr.** has announced the association of **Dr. J. Lorin Mason Jr.** in the practice of Orthopedics at 333 West Palmetto St., Florence. Dr. Mason is a diplomate of the American Board of Orthopaedic Surgery. **Dr. T. K. Fairey**, Health Officer of Saluda and Edgefield Counties, has retired after 30 years of service to the State Board of Health. A graduate of Wofford College and the Medical College of South Carolina, Dr. Fairey was the first intern to serve at the Columbia Hospital. In the early twenties he practiced medicine in St. Matthews with his father, **Dr. J. K. Fairey**. Before becoming health officer, Dr. Fairey carried on a private practice in Johnston. He will continue to serve Edgefield County as clinician in charge of regular clinics at the health department. **Dr. Von A. Long**, current Health Officer of Newberry and Laurens Counties, is the new Saluda County Health Officer. **Dr. Herschel B. Kaufman** is now head of the Goose Creek Health Department. **Dr. Robert S. Solomon** of Moncks Corner has received a new term running until July, 1972, on the S. C. Commission of Alcoholism.

MEETINGS

The American College of Physicians will present "Basic Mechanisms in Internal Medicine" October 7-11 in Baruch Auditorium, Richmond, Va.

For more information write: Edward C. Rosenow, Jr., M.D., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

* * *

The 8th Annual Charlotte Postgraduate Seminar will be held October 2-3 in Presbyterian Hospital Auditorium, Charlotte, N. C.

The speakers include Robert B. Greenblatt, M.D., J. Willis Hurst, M.D., Beverly T. Mead, M.D., Roger S. Mitchell, M.D., Israel Penn, M.D., Nicholas Vorys, M.D., and Warren E. Wheeler, M.D. There is no registration fee. Seventeen hours AAGP credit are given for attending.

* * *

The 20th Annual Scientific Assembly, sponsored by the South Carolina Academy of General Practice, will be held November 13-15 at the Hotel Francis Marion, Charleston, S. C.

* * *

The American Heart Association's 41st Scientific Sessions will be held November 21-24 at the Americana Hotel, Bal Harbour, Fla. The Annual Meeting of the association will be held there from November 24-26.

* * *

The 11th Congress of the Pan-Pacific Surgical Association is scheduled for October 14-22 in Honolulu. This follows the meeting of the American College of Surgeons in San Francisco, October 6-10.

The scientific program will consist of some 350 speakers in all surgical specialties.

20th ANNUAL SCIENTIFIC ASSEMBLY
SOUTH CAROLINA CHAPTER OF THE
AMERICAN ACADEMY OF GENERAL PRACTICE

November 13-15, 1968

Francis Marion Hotel, Charleston, S. C.

WEDNESDAY, NOVEMBER 13, 1968

9:00 A.M. Registration

9:30 A.M. Board of Directors Meeting

12:00 Noon Luncheon (Board of Directors, Officers, Chairman, Committees Commissions)

1:00 P.M. Welcome—Asbury C. Bozard, M.D., President

1:15 P.M. Excessive Insulin in the Diabetic Patient: A Frequent Problem With Grave Consequences
Joseph C. Shipp, M.D., Assoc. Professor, The J. Hillis Miller Health Center, Univ. of Florida (sponsored by Pfizer Laboratories)

2:00 P.M. Cardiac Pacemakers—William S. Houck, M.D., Surgeon, Florence, S. C.

3:00 P.M. Urological Problems of the General Practitioner—Part I David W. Goddard, M.D., F.A.C.S., Daytona Beach, Florida (sponsored by Eaton Labs.)

4:00 P.M. 4:00 P.M. Strokes, the first step: Differential Diagnosis
Hiram Curry, M.D., Associate Professor of Neurology, Medical College of S. C. (sponsored by S. C. Regional Medical Program)
Exhibits Open

5:15 P.M. Adjourn

8:00 P.M. President's Reception
(courtesy of Marion and Table Rock Laboratories)

THURSDAY, NOVEMBER 14, 1968

9:00 A.M. Stroke, the second step: Choice of Therapy.
A Speaker will be announced by Dr. Charles P. Summerall, Coordinator for Heart Disease and Stroke, SCRMP (sponsored by the South Carolina Regional Medical Program)

9:40 A.M. Surgery and Diabetes: Recognition of the Diabetic and Treatment Before, During and After Surgery. Joseph C. Shipp, M.D., Associate Professor, The J. Hillis Miller Health Center, Gainesville, Florida (sponsored by Pfizer Laboratories)

10:20 A.M. Business Meeting

11:00 A.M. Urological Problems of the General Practitioner—Part II
David W. Goddard, M.D., M.A.C.S., Daytona Beach, Florida (sponsored by Eaton Labs.)

11:40 A.M. Chemotherapy, Specifically Related to Gynecological Malignancies—Paul B. Underwood, Jr., M.D., Assistant Professor of Obstetrics and Gynecology, Medical College of South Carolina

12:15 P.M. Jaundice In Newborn—Milton Westphal, M.D., Chairman, Department of Pediatrics, Medical College of South Carolina

1:00 P.M. Luncheon
Detail men are cordially invited to be our guests for this luncheon.

FREE AFTERNOON—Tours, etc, planned by the Local Arrangements Committee Information may be obtained at the registration desk.

7:00 P.M. Social Hour, (sponsored by B. F. Ascher Company)

8:00 P.M. Banquet
Speaker, Maynard I. Shapiro, M.D., President Elect, The American Academy of General Practice

FRIDAY, NOVEMBER 15, 1968

Immunization Symposium, sponsored by the National Communicable Disease Center, under the direction of Dr. R. Burt Prater, Acting Chief.

9:00 A.M. Present Status of Immunization Procedures (immunization agents, effectiveness, shortcomings and weakness, etc.)

9:40 A.M. Use and Abuse of Gamma Globulin (rubella, mumps, hepatitis—monthly injections)

10:40 A.M. Rubella and Mumps Vaccine (Use, recommendations, possible spread to pregnant females, etc.)

11:20 A.M. Access to Biological Studies of the South Carolina State Board of Health Laboratory Facilities—Arthur F. DiSalvo, M.D., Director, Division of Laboratories, S. C. State Board of Health.

12:00 Noon Luncheon
Speaker, William M. McCord, M.D., President, Medical College of South Carolina

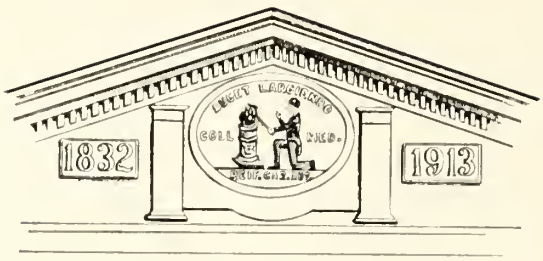
1:30 P.M. Measles and Smallpox (complications and Contraindications)

2:10 P.M. Respiratory Vaccines—Current Considerations

3:00 P.M. Horizons in Vaccine Development and Antiviral Agents (adenovirus, cold, interferon)

3:40 P.M. Panel Discussion

5:00 P.M. Drawing of Door Prizes
Adjournment.



Medical College of South Carolina

Dr. Dale Groom, has been named associate dean of continuing education at the University of Oklahoma School of Medicine.

He will join the faculty in Oklahoma City as professor of medicine early next year.

A member of the Medical College of South Carolina faculty since 1953, Dr. Groom serves as associate professor of medicine and assistant dean for continuing education in the School of Medicine.

Dr. Groom, who pioneered South Carolina's Educational Television medical broadcast series, has gained national recognition for this work.

FACULTY ADVANCEMENTS

Thirty members of the Medical College faculty have been promoted, Dr. William M. McCord has announced.

Promoted to the rank of professor in their respective departments are Dr. Richard H. Gadsden, chemistry; Dr. Bernard Metz, physiology; and Dr. Michael G. Weidner, Jr., surgery. Dr. Kathleen A. Riley has been promoted to the rank of clinical professor of dermatology.

Promoted to the rank of associate professor are Dr. Willis K. Mylin, anatomy; Dr. Eugene Y. Smith, Jr., medicine; Dr. Walter M. Bonner, Jr., medicine; Dr. Stuart N. Richardson, medicine; Dr. Hiram B. Curry, neurology; Dr. H. Oliver Williamson, obstetrics and gynecology; Dr. Ervin E. Bagwell, pharmacology; Dr. S. Elliott Puckette, Jr., radiology; Dr. H. Biemann Othersen, Jr., surgery and pediatrics; Dr. Gilbert B. Bradham, surgery; and Dr. John F. Finklea, preventive medicine and pediatrics. Dr. Frank H. Gruber has been promoted to the rank of associate clinical professor of radiology.

Promoted to the rank of assistant professor are Dr. Burness A. Barrington, anatomy; Dr. Hilda S. Debacker, anatomy; Dr. Raymond C. Pennington, anatomy; Dr. Brian N. Smith, medicine; Dr. Robert L. Galphin, Jr., medicine; Dr. Carter S. Bagley, otorhinolaryngology; Dr. Herman B. Danicll, pharmacology; Dr. Jack K. Pruett, pharmacology; Dr. Walter Newman, pharmacology; Dr. Earl Godfrey, neurology, and Dr. John G. Blackburn, physiology. Promoted to the rank of assistant clinical professor are Dr. Eleas Lawandales, pediatrics; Dr. Julian T. Buxton, Jr., surgery; and Dr. A. Lawrence Lemel and Dr. George R. Laub, otorhinolaryngology.

FACULTY APPOINTMENTS

Dr. William M. McCord has announced 25 new appointments bringing the total of part and full time faculty to nearly 350.

New faculty members appointed to the rank associate clinical professor are Dr. Benjamin C. Riggs, psychiatry; Dr. Samuel H. Sandifer, medicine and preventive medicine; and Dr. E. Arthur Dreskin, pathology.

Appointed to the rank assistant professor are Dr. Darrell D. Wheeler, physiology; Dr. Lamar E. Priester, Jr., chemistry; Dr. Mary Velish McIndoo, psychiatry; and Dr. Arabinda K. Sinha, physiology.

Receiving assistant clinical professor appointments were Dr. Cecil F. Jacobs, preventive medicine; Dr. Donald G. Kilgore, Jr., pathology; and Dr. Donald H. Robinson, preventive medicine.

Newly appointed associates are Dr. Charles J. Owens, medicine; Dr. William M. Davis, pathology; Dr. Jack E. Arrants, thoracic surgery; Dr. James H. Hardin, pathology; Dr. Broadus F. Sowell, medicine; Dr. Robert W. Ogilvie, anatomy; and, Dr. Patricia Randals, psychiatry. Dr. H. Parker Jones has been appointed a clinical associate in preventive medicine.

New instructors are Dr. Margaret Deanesly, (Mrs. Paul J. Biegler,) medicine; Dr. D. Charles Dixon, pathology; Dr. David W. Hiott, pharmacology; Dr. Mario Kuperminc, medicine; and Dr. Charles A. Mood, pediatrics. Dr. Joseph L. Goodman has been appointed a clinical instructor in preventive medicine.

Martha G. Flynn, Hal S. Currey, and Ulrich A. Hasal have been appointed assistants in occupational therapy, psychiatry, and pathology respectively.

MEDICAL COLLEGE OF SOUTH CAROLINA

POSTGRADUATE SEMINAR ON INTERNAL MEDICINE

WEDNESDAY—OCTOBER 2, 1968

12:00 Registration

1:00 Iron Metabolism—Dr. Stuart Richardson, Absorption transport and loss of iron and the synthesis of hemoglobin will be discussed so that the approach to anemias can be better understood.

1:45 Evaluation and Management of the Patient with Andemia.—Dr. Byrd Stuart Leavell, Professor of Medicine, University of Virginia, Charlottesville, Virginia.

3:00 *Disability Evaluation in Chronic Pulmonary Disease — Dr. Ross McLean, Professor of Medicine. (Section on Pulmonary Diseases), Emory University School of Medicine.

3:45 Questions & Answers

4:00 Cardiology Seminar on Arrhythmias — Dr. Peter C. Gazes, Dr. Charles Summerall, Dr. Grady Hendrix. Tachycardias and heart block will be covered. Techniques for detection, the use of drugs and the newer pacing methods will be described.

5:15 Adjournment

*Sponsored by the S. C. Tuberculosis Association.

THURSDAY—OCTOBER 3, 1968

8:30 Registration

SYMPOSIUM ON NEURODIAGNOSTIC PROCEDURES PRESENTED BY THE DEPT. OF NEUROLOGY.

9:00 Electromyography, Muscle Biopsy and Enzyme Studies in the evaluation of muscle weakness. Dr. Earl Godfrey.

9:30 The Electroencephalogram, The ECHO—encephalogram and the Radioisotope Brain Scan in the study of Brain Disease.
Dr. Rhett Talbert
Dr. Neil Marshall

10:45 The Cerebral Circulation—Dr. Hiram Curry. Techniques for study will be demonstrated.

11:00 Panel Discussion: Selection of Stroke Patients for Intensive Diagnostic Study and Possibly for Surgery.
Dr. Rhett Talbert

11:45 Lunch

1:00 Cytogenetic Techniques in Diagnosis — Dr. Forde McIver, Department of Pathology. Use of chromosome studies in study of inherited diseases will be demonstrated.

1:45 Treatment in Chronic Pulmonary Emphysema —Dr. Robert Galphin

2:45 INH Prophylaxis against Tuberculosis. Dr. Eugene Smith

3:15 Panel Discussion on The Current Management of Asthma.
Dr. Kelly McKee
Dr. Charles H. Banov
Dr. John L. Buerrant (Professor of Medicine, University of Virginia School of Medicine, Charlottesville, Virginia)

Indigent Care Program

A comprehensive medical care program for indigent persons has begun limited operations at the Medical College of South Carolina Hospital, but it is still hunting for permanent headquarters.

The program, financed by a $1,106,000 grant from the Office of Economic Opportunity, will be initially limited to a patient load of about 5,000 persons.

Eventually, the program is expected to serve 15,000 to 20,000 persons and cost more than $3.2 million annually.

Respiratory Deaths

Recent research into the causes and progressive nature of emphysema and other chronic lung diseases is the subject of "Current Research in Chronic Airways Obstruction", a new 400-page publication released by the National Center for Chronic Disease Control.

The publication (Public Health Service Publication No. 1717) contains 30 papers presented at the 9th Aspen Emphysema Conference.

A limited number of single copies are available from the Public Inquiries Branch of the Public Health Service, Washington, D.C. The publication may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, for $2.00 each of $150 per hundred.

Deaths in South Carolina from emphysema and chronic bronchitis increased 57.7 per cent in the period from 1962-1966.

Studies indicate that deaths from all respiratory diseases increased 13 per cent on a national level during this same period. Death due to emphysema and chronic bronchitis increased 60 per cent nationally.



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CHIROPRACTIC STAND AFFIRMED

The House of Delegates of the American Medical Association approved a resolution urging state and county medical societies to alert the general public to the health hazard posed by the cult of chiropractic.

The resolution further urged constituent state medical associations and component medical societies to adopt formally the AMA policy statement or some similar expression on chiropractic.

The policy statement, adopted at the 1966 clinical session, noted that: "It is the position of the medical profession that chiropractic is an unscientific cult whose practitioners lack the necessary training and background to diagnose and treat human disease. Chiropractic constitutes a hazard to rational health care in the United States because of the substandard and unscientific education of its practitioners and their rigid adherence to an unscientific approach to disease causation."

The statement went on to explain the U. S. District Court decision and U. S. Supreme Court affirmation of a state's constitutional right to refuse to license chiropractors, and to delineate the "harmful results" from the delay of proper medical care caused by chiropractors and their opposition to the many scientific advances of modern medicine.

AMA News

Hall Institute Accreditated

Accreditation of the William S. Hall Psychiatric Institute, the training and research unit of the South Carolina Department of Mental Health, has been announced by C. M. Tucker, Jr., chairman of the South Carolina Mental Health Commission. Accreditation is for a three-year period.

In a letter to Dr. Alexander G. Donald, director of the Hall Institute, Dr. Porterfield, director of the Joint Commission, said: "The commission wishes to commend you for maintaining standards deserving of accreditation and for your constant effort to improve the quality of patient care. Please be assured of our interest and of our willingness to be of all possible help to you."

"Those of us in the Department of Mental Health who have worked so diligently on the development of the institute are extremely pleased that accreditation has come so soon," added Dr. William S. Hall, State Commissioner for Mental Health.

The Hall Institute was initially opened as an admission-exit unit of the State Hospital in 1963. In 1965 it was set apart as a research and training center, separate from the State Hospital.

The institute began accepting in-patients in September, 1966, and made application for accreditation in November, 1967. The institute was inspected in April and notification of approval has now been received.

"Accreditation of the institute further establishes South Carolina as a leader in the field of mental health," Dr. Hall said; "In 1964 the State Hospital became the first state mental facility in the Southeast to receive the stamp of approval by the joint commisison. Now we are one of only two states in the Southeast to have two mental facilities so accredited."

In addition to the psychiatric training program, the institute has the only approved psychologist intern program in South Carolina and also offers an accredited clinical pastoral education program and a pastoral supervisory training program for ordained clergy.

Hospital News

With a daily average of 97.9 emergency room patients, Greenville General Hospital has made arrangements with four physicians to furnish full-time, 24-hour physician service in the emergency room.

The four physicians are Dr. D. E. Waller, Dr. Leroy Howard, Dr. J. H. Talley and Dr. J. A. Dennis. Dr. Waller will serve as chief of the emergency room service.

DEATHS

Dr. Franklin Clayton Fetter

Dr. Franklin C. Fetter, 54, Dean of the School of Medicine at the Medical College of South Carolina, died July 21 at a Charleston hospital.

Dr. Fetter was named dean of the School of Medicine in January, 1966. In November of the same year he was named first vice president of the Medical College.

He was born in Park Place, Penn.

He graduated from the University of Pennsylvania with a B.A. in 1936 and received his M.D. degree from Jefferson Medical College in 1940.

Dr. Fetter interned at Philadelphia General Hospital from 1940 to 1942 and also served his residency there from 1946 to 1958.

He served as an Army medical officer in the Pacific during World War II and returned to Philadelphia General Hospital where he served as chief resident physician and then assistant medical director from 1946 to 1951.

He has also served at the Albert Einstein Medical Center and Presbyterian Hospital in Philadelphia. He was director of medical education from 1963 until 1966 at Interhospital Committee of Wilmington, Del., assuming responsibility for the advanced medical education of interns and residents in the program there.

He also has held a position as associate professor at Temple University School of Medicine.

He was a member of the Association of Hospital Directors of Medical Education, the Association of American Medical Colleges, the American College of Hospital Administrators, the American Public Health Association and the Alpha Omega Alpha, an honorary medical society.

Dr. Robert Malcolm

Dr. Robert Malcolm, 81, of Sullivan's Island, former director of the venereal disease clinic of the Charleston County Health Dept. died August 1.

Dr. Malcolm was born in Jersey City, N. J., on Sept. 14, 1886. He received his medical degree from Bellevue Medical School of New York University.

Dr. Malcolm practiced medicine in Yonkers, N. Y., prior to service as a surgeon in the National Guard's 69th Division on the Mexican border in 1917. He attended Army Medical School and later served in the Philippines as attending physician to the governor general of The Philippines.

For three and a half years Dr. Malcolm was commanding officer of the Army Hospital at Fort Moultrie. He retired from the Army as a Major in 1934 and became a resident of Sullivan's Island. During World War II he was medical examiner for the Selective Service board of the Charleston district office. He received the Selective Service Medal and a commendation from President Truman for his four-year voluntary service.

After World War II, Dr. Malcolm returned to private practice in the Mount Pleasant and Sullivan's Island areas. In 1948, he was appointed clinical director of venereal disease control for the Charleston County Health Dept.

Dr. Malcolm was a member of the Fifty Year Club of American Medicine, the Medical Society of S. C., the S. C. Medical Assn., the Charleston County Medical Society and the American Medical Assn.

Dr. John Charles Barnett

Dr. John Charles Barnett, 37, associate director of student health service at Clemson University, died July 13 at his home.

A native of Marietta, Dr. Barnett was a graduate of Clemson University and completed his medical training at the Medical College of South Carolina. He practiced medicine for a short time in Slater before coming to Clemson in 1959 as associate director of student health service.

He was a member of the American Medical Association, the South Carolina Medical Association, the Anderson County

Medical Society, the American Academy of General Practice, the National Athletic Trainers Association, the American College Health Association.

Dr. Robert W. Mance Jr.

Dr. R. W. Mance Jr., 65, died July 9 in Upsala, Sweden of a heart attack. He was in Sweden as a delegate to the assembly of the World Council of Churches.

He was born in Newbery and received his B.A. and M.D. degrees from Howard University.

He received an honorary doctorate from Wilberforce College in Ohio and was a trustee there and of the Interdenominational Theological Seminary in Atlanta.

In 1951 he received the Alexander Meiklejohn award.

After receiving his medical degree he practiced in Columbia from 1931 to 1954.

He was a member of the Medico Chirugical Society, the National Medical Association, Sigma Pi Phi and Alpha Phi Alpha.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications, an adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

RhoGAM

Biological. Rx

Manufacturer: Ortho Diagnostics

Nonproprietary Name: Rho(D) Immune Globulin (Human)

Indications: Prevention of formation of active antibodies in the Rh negative mother who has delivered an Rh positive infant.

Contraindications: Rho(D) positive or Du positive individual, Rho(D) negative patient who has received an Rho(D) positive blood transfusion, exist-

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ing immunization to the Rho(D) blood factor.

Dosage: One vial, i.m., within 72 hrs. after delivery or miscarriage.

Supplied: Vials—packages of 1.

VERACILLIN

Antibiotic-Penicillin. Rx

Manufacutrer: Ayerst Laboratories

Nonproprietary Name: Sodium Dicloxacillin Monohydrate

Indications: Infections due to penicillinase-producing staphylococci, streptococci, pneumococci, and also penicillin-sensitive staphylococci.

Contraindications: Hypersensitivity to penicillin.

Dosage: Adults—125 to 500 mg q6h. Children—12.5 to 50 mg/kg./day in divided doses, not to exceed recommended adult dosage.

Supplied: Capsules—125 and 250 mg; bottles of 20 and 100.

DUPLICATE SINGLE PRODUCTS

PATHOCIL

Antibiotic-Penicillin. Rx

Manufacturer: Wyeth Laboratories, Inc.

Nonproprietary Name: Sodium Dicloxacillin Monohydrate

Indications: Infections due to penicillinase-producing staphylococci, streptococci, pneumococci, and also penicillin-sensitive staphylococci.

Contraindications: Hypersensitivity to penicillin.

Dosage: Adults—125 to 250 mg q.i.d. Children—12.5 to 25 mg/kg/day in divided doses, if body wt. more than 40 kg follow adult dosage.

Supplied: Capsules—125 and 250 mg; bottles of 25 and 100. Powder for oral suspension—62.5 mg/5ml.

COMBINATION PRODUCTS

ALDOCLOR

Hypotensive. Rx

Manufacturer: Merck Sharp & Dohme

Composition: Tablets:	150	250
Methyldopa	250 mg	250 mg
Chlorothiazide	150 mg	250 mg

Indications: Sustained moderate to severe hypertension.

Contraindications: Active hepatic disease, pheochromocytoma, anuria, and mild or liabile hypertension responsive to mild sedation or thiazide therapy alone.

Dosage: 1 tab. (either strength) 2 or 3 times daily, during first 48 hours, thereafter to be adjusted individually. Do not exceed 3 gm of methyldopa or 1-1.5 gm of chlorothiazide.

Supplied: Tablets; bottles of 100.

DIALOG with Codeine

Analgesic-Narcotic. Rx

Manufacturer: Ciba Pharmaceutical Co.

Composition: Tablet:	No. 2	No. 3
Codeine phosphate	15 mg	30 mg
Allobarbital	15 mg	15 mg
Acetaminophen	300 mg	300 mg

Indications: Tension headache, neuralgia, more severe pain.

Contraindications: None mentioned.

Dosage: As indicated by physician.

Supplied: Tablets

NIFEREX with CALCIUM

Hematinic/Vitamin Comb. o-t-c

Manufacturer: The Central Pharmacal Co.

Composition: Iron (elemental)	25 mg
Calcium carbonate	312 mg
Ascorbic acid (as sodium ascorbate)	125 mg

Indications: Mineral supplement

Contraindications: Hemochromatosis or hemosiderosis.

Dosage: 2 tablets daily.

Supplied: Tablets; bottles of 100 and 1,000.

COMBINATIONS PRODUCTS

SEAFER

Hematinic. o-t-c

Manufacturer: S. F. Durst & Co., Inc.

Composition: Iron 40 mg. Asorbic acid 100 mg

Indications: Iron deficiency anemias. Need for iron supplementation during pregnancy, onset of menses, or chronic blood loss.

Contraindications: None mentioned.

Dosage: Adults—3 or 4 tablets daily. Children over 6 years—1 or 2 tablets daily. Under 6 years—as directed by physician.

Supplied: Tablets; bottles of 100 and 1,000.

HIGH TIME TO KEEP UP

If you are a practicing physician who sees patients with cerebrovascular disease, but feel you can't take time off to keep up, the following information is for you!

The Bowman Gray School of Medicine has established a program through which internists and generalists may take two-to-six weeks of intensive training in the prevention and treatment of stroke. The unique program includes re-orientation in basic and clinical neurology as well as cerebrovascular medicine.

Physicians accepted for the program receive $200 per week.

For additional information write to:

Monroe Cole, M.D.
Department of Neurology
Bowman Gray School of Medicine
Winston-Salem, N. C. 27103

NEW DOSAGE FORMS

DIALOG Elixir

Analgesic—Non-Narcotic. Rx

Manufacturer: Ciba Pharmaceutical Co.

Composition: Each 5 ml contains: Allobarbital 7.5 mg. Acetaminophen 150 mg.

Indications: Relief of pain in children.

Contraindications: None mentioned.

Dosage: As indicated by physician.

Supplied: Elixir; pint bottles.

SERAX Tablets

Ataraxic Rx

Manufacturer: Wyeth Laboratories

Nonproprietary Name: Oxazepam

Indications: Anxiety, tension, agitation, irritabiilty and related symptoms.

Contraindications: Psychoses, hypersensitivity to the drug.

Dosage: 10 to 30 mg, 3 or 4 times daily. Should be individualized.

Supplied: Tablets—15 mg; bottles of 100.

DUPLICATE SINGLE PRODUCTS

PRO-TET

Biological. Rx

Manufacturer: Lederle Laboratories

Non proprietary Name: Tetanus Immune Globulin, Human

Indications: Passive immunization.

Contraindications: Not for i.v. inj.

Dosage: Adults—250 units i.m. Children—4 units/Kg. i.m.

Supplied: Vials—250 units.

VASAL

Antispasmodic. Rx

Manufacturer: S. J. Tutag & Co.

Nonproprietary Name: Papaverine HC1

Indications: Cerebral and peripheral ischemia associated with arterial spasm, myocardial ischemia complicated by arrhythmias.

Contrandications: None mentioned.

Dosage: One capsule every 12 hrs., may be increased to two caps. q12h or one cap. q8h.

Supplied: Capsules—150 mg (sustained release)

COMBINATION PRODUCTS

NEBAIR

Bronchial Dilator. Rx

Manufacturer: Warner-Chilcott

Composition: Isoproterenol HC1 63 mcg/metered spray. Thonzonium Bromide? mcg/metered spray.

Indications: Acute bronchospasm in cases of moderate and markedly severe bronchial asthma, emphysema, chronic bronchitis with reversible bronchospastic components.

Contraindications: Preexisting cardiac arrhythmias associated with tachycardia; hypersensitivity to either ingredient.

Dosage: Adults and children over 12 yrs.: One or two sprays q3-4h. If two sprays are necessary they should be spaced 1 min. apart. Not for children under 12 yrs.

Supplied: Aerosol for oral inhalation—12.6 Gm of solution.

NORLAC

Vitamins/Minerals Comb.-Prenatal. o-t-c

Maufacturer: Rowell Laboratories

Composition: Eleven vitamins and six minerals.

Indications: Nutritional supplement in pregnancy and lactation.

Contraindications: None mentioned.

Dosage: One tablet daily.

Supplied: Tablets—bottles of 100, 500 and 5,000.

NEW MEMBERS SCMA

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333 W Palmetto St.
Florence

Dr. J. Horton Smith
X-Ray Dept.
Anderson Memorial Hospital
Anderson

Malaria Report

Prediction is that the U. S. would record between 2,500 and 3,000 malaria cases in 1967 apparently are being borne out. The National Communicable Disease Center reports 2,070 cases—1,981 among military personnel and 89 among civilians—through mid-October.

NCDC's malaria surveillance branch says all but seven cases were contracted outside the U. S. These seven "introduced" cases include two that occurred at Ft. Campbell, Ky., where two servicemen apparently were infected by mosquitoes carrying malaria parasites from soldiers who had served abroad.

According to Dr. George Fisher of the surveillance branch, 1,899 of the military cases were primary attacks this year and 82 were relapses from primary attacks in 1966. NCDC figures indicate that the proportion of falciparum malaria cases has declined from 32% of all cases in 1966 to 13% of cases reported through August 1967. Meanwhile, the proportion of vivax malaria cases has risen from 60% to 82%.

Book Reviews



HANDBOOK OF FRACTURES by Edgar Lee Ralston, B.A., M.D., F.A.C.S. C. V. Mosby Company, St. Louis, Mo., 1967.Pp. 229. $10.75.

The author begins his book with "Another book about fractures!" He has found that the teaching of fractures has not been given the emphasis deserved and with curricula of medical schools being further compressed, it is doubtful that more time can be allowed. He suggests approaching the teaching of students by stressing the fundamentals and broad general principles concerned in the management of fracture problems. The teacher should resist offering students a detailed and broad picture of specific methods of fracture treatment. He should omit and barely touch upon technical details. The specific approach and technical details can wait until the student interested in this subject can advance further in its study.

The book of 286 pages, well indexed, offers such a broad outline of fundamentals. It is clearly written and well illustrated. Treatment is dealt with to a certain extent. This much, however, would be completely necessary in any study of fractures.

The book should serve the medical student well as a fundamental survey of the subject.

B. L. Freeman, Jr., M.D.

ELECTROCARDIOGRAPHIC NOTEBOOK, by M. Irene Ferrer, M.D. Third Edition. Hoeber Medical Division, Harper & Row, New York, 1968. Pp. 144, $3.45.

A pocket-sized, surprisingly thorough presentation of clinical electrocardiography by the director of the electrocardiographic laboratory of the Columbia-Presbyterian Medical Center, New York. The separation of text and illustrations into the first and last portions of the book would be confusing to beginners. This would be a useful book for the medical house-officer and resident to carry in his pocket, or the practicing physician in his bag.

John A. Boone, M.D.



THE BRADLEY CENTER

An all new homelike psychiatric residence located on a lovely five-acre tract inside the city, providing a comprehensive range of services, including inpatient (28 beds), day care, and outpatient treatment. The therapeutic setting is an open community one with no provisions for locked wards. Each patient participates in an intensive treatment program consisting of individual pyschotherapy, group psychotherapy, topical small group discussions, occupational therapy and recreational therapy, and other group activities in the Center as well as in the community, depending on individual interests and needs. Drugs are used when appropriate.

Any individual may be admitted who, in the opinion of the staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible member of his family.

Brochures and rate schedules are available on request.

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let's be specific about Campbell's Soups... and *reducing diets*



There are more than 30 million people in America who are overweight. During the next year, you probably will see more than 1,000 of them in your own practice.

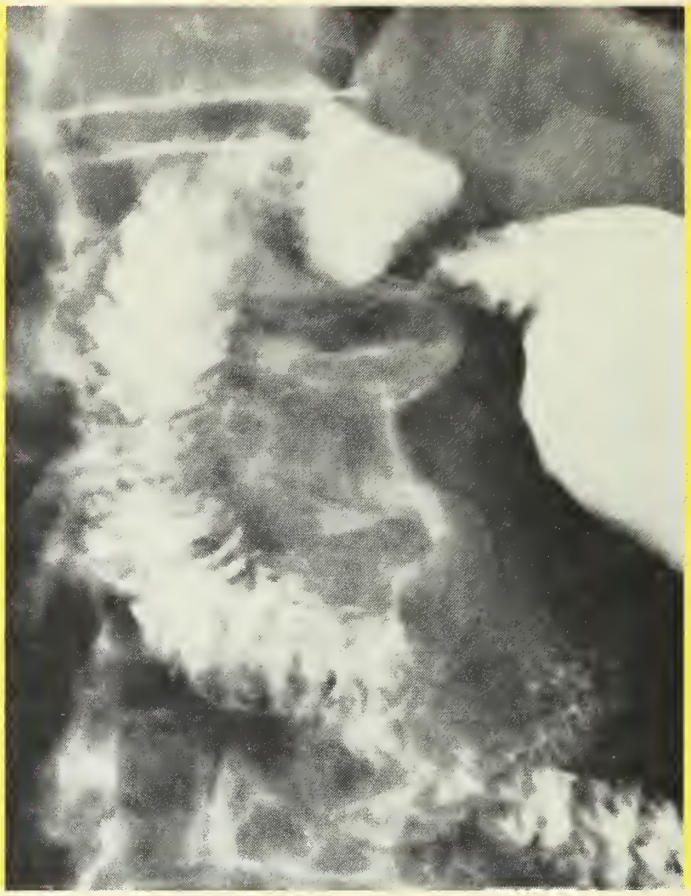
One good way to help these patients is to give them a reducing diet based on ordinary eating patterns.

Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



To obtain a supply for your office write to:
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THE RESTLESS DUODENUM...



DUODENUM—(Conventional X-ray) The restless duodenum makes radiographic diagnosis difficult, uncertain and often unproductive. Is this duodenum normal?

Pro-Banthine®
brand of
propantheline bromide

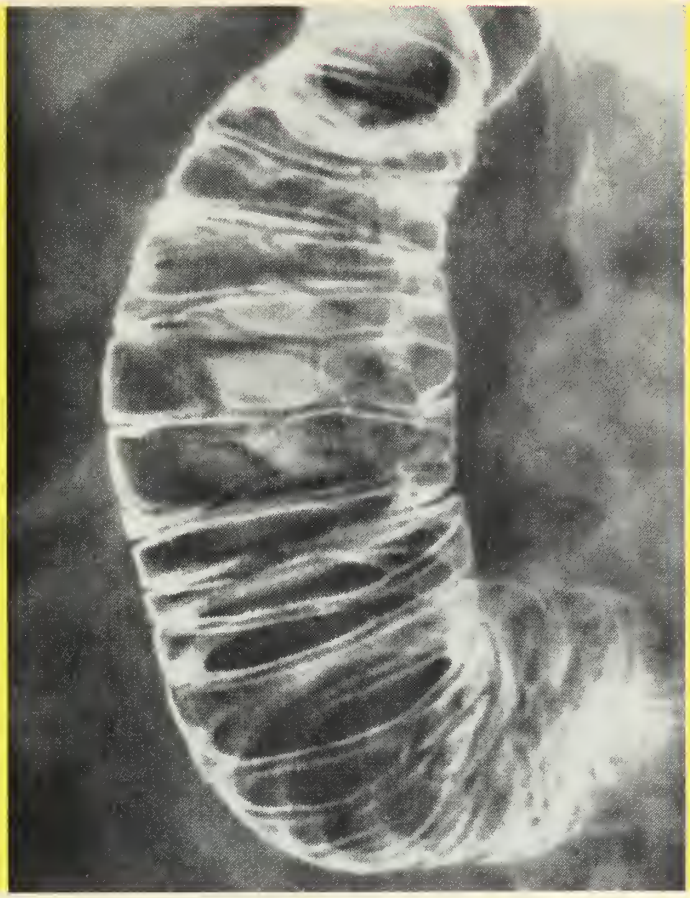
For fifteen years Pro-Banthine has been the most widely used anticholinergic agent in disorders of gastrointestinal motility and gastric hypersecretion. More recently Pro-Banthine has reestablished its pharmacologic effectiveness in facilitating diagnostic procedures using intragastric fibroscopy and hypotonic roentgenography.

How the X-rays were taken

In the hypotonic duodenograph[1,2] reproduced above, the gastrointestinal trac was relaxed with Pro-Banthine. The duo denum was intubated. Pro-Banthine i a dose of 60 mg. intramuscularly wa used to assure prompt aperistalsis, an double-contrast visualization wa achieved with ordinary barium and ai

The same pharmacologic efficienc has proved of pronounced value in suc conditions as: *peptic ulcer, pylorospasm biliary dyskinesia, functional hyperm tility and irritable colon.*

...AT REST



SAME DUODENUM—(Hypotonic X-ray) Pro-Banthine-induced duodenal calm permits full anatomic appraisal in the same patient. Duodenal normality is now evident.

calms the gastrointestinal tract

Contraindications: Glaucoma; severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly males with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

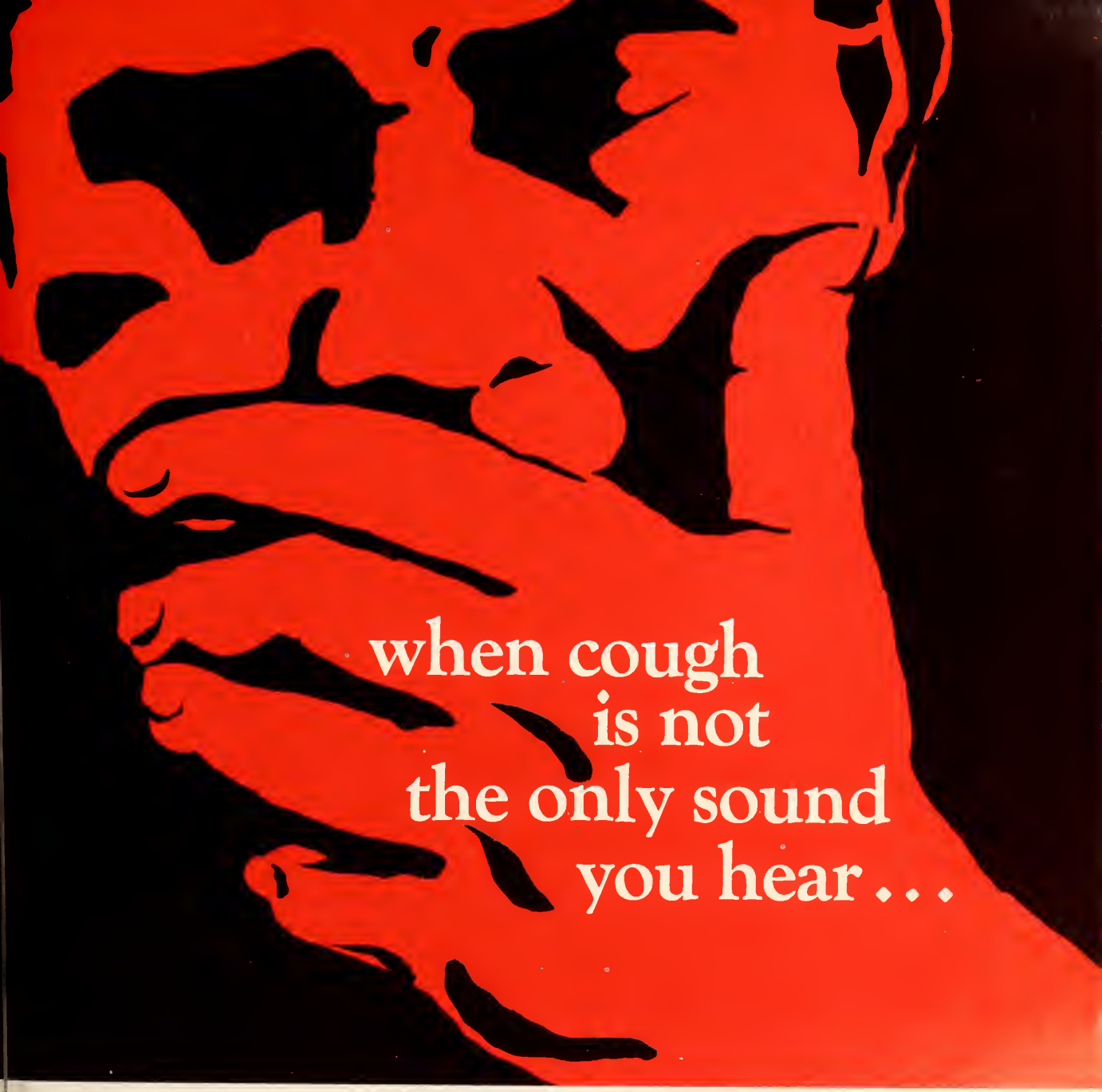
(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27–Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology 89:438-443 (Sept.) 1967.

See also: Liotta, D.: Pour le diagnostic des tumeurs du pancréas: La duodénographie hypotonique, Lyon chir. 50:445-460 (May-June) 1955.

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OMNI-TUSS® b.i.d.

. . . **because** OMNI-TUSS is indicated for cough associated with upper respiratory tract infections, bronchitis, bronchiectasis, bronchial asthma, emphysema, sinusitis and rhinitis, hay fever, or other allergic conditions. Any of these conditions may exhibit the general symptom syndrome—coughing, wheezing, bronchospasm, and tenacious mucus—which may benefit from the antitussive, bronchodilative, antihistaminic, and expectorant action of Omni-Tuss.

The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

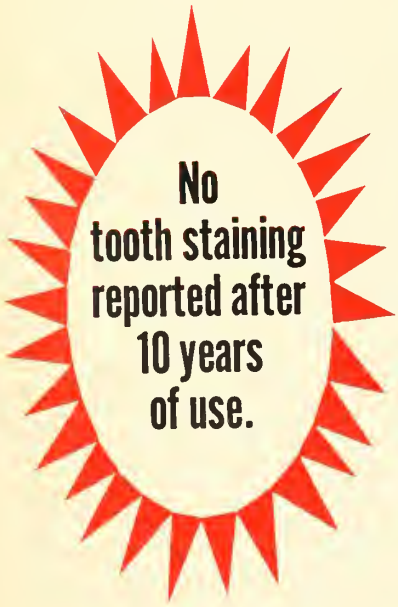
Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

Strasenburgh

Strasenburgh Laboratories Division
Wallace & Tiernan Inc., Rochester, N.Y.

new evidence for TAO® (triacetyl-oleandomycin)



a
macrolide
antibiotic for the
frequently seen
respiratory infection
in the office
and
for a problem pathogen*
in the hospital.

*Staphylococcus aureus

study I[1]

Results of a 1967 in vitro—in vivo correlation study involving 116 patients with Gram-positive coccal infections in five institutions. All patients were given TAO prior to determining the susceptibility of the offending organism.

97.0%
of the organisms were susceptible to oleandomycin*

98.0%
of the patients responded favorably to TAO® (triacetyloleandomycin)

*In some cases more than one pathogenic organism was isolated from the patient.

study II[2]

Effect of oral therapy with TAO, erythromycin, and cloxacillin on the survival time of Rhesus monkeys after intravenous inoculations of lethal doses of staphylococci, phage type 80/81.
(8 monkeys in each group)

conclusion:

*Under the conditions of this study and the doses employed, it was found that

TAO® (triacetyl-oleandomycin)

was far superior to erythromycin, as was cloxacillin, a bactericidal agent, and of particular interest, "...bacteriostatic triacetyloleandomycin was as effective or perhaps superior to cloxacillin in preventing lethal (staphylococcal, phage type 80/81) infection."

*It should be pointed out that results obtained in an experimental study of this nature may not necessarily be directly extrapolated to the clinical situation as it pertains to man.

TAO Rx Information

INDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents. **CONTRAINDICATIONS AND PRECAUTIONS:** Not recommended for prophylaxis or in the treatment of infectious processes which may require more than ten days continuous therapy. In view of the possible hepatoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgement dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including darkfield examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug. Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

References: 1. Isenberg, H. D.: Clinical Evaluation of Laboratory Guidance to Antibiotic Therapy; Health Laboratory Science (July) 1967. 2. Saslaw, S., Carlisle, H. N.: Studies on Therapy of Staphylococcal Infections in Monkeys. 1. Comparison of Cloxacillin, Triacetyloleandomycin and Erythromycin. Proc. Soc. Exp. Biol. & Med.: Vol. 125, No. 4 (Aug.-Sept.) 1967.

ROERIG Rx
J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
235 EAST 42nd STREET
NEW YORK, N.Y. 10017

In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reactio (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

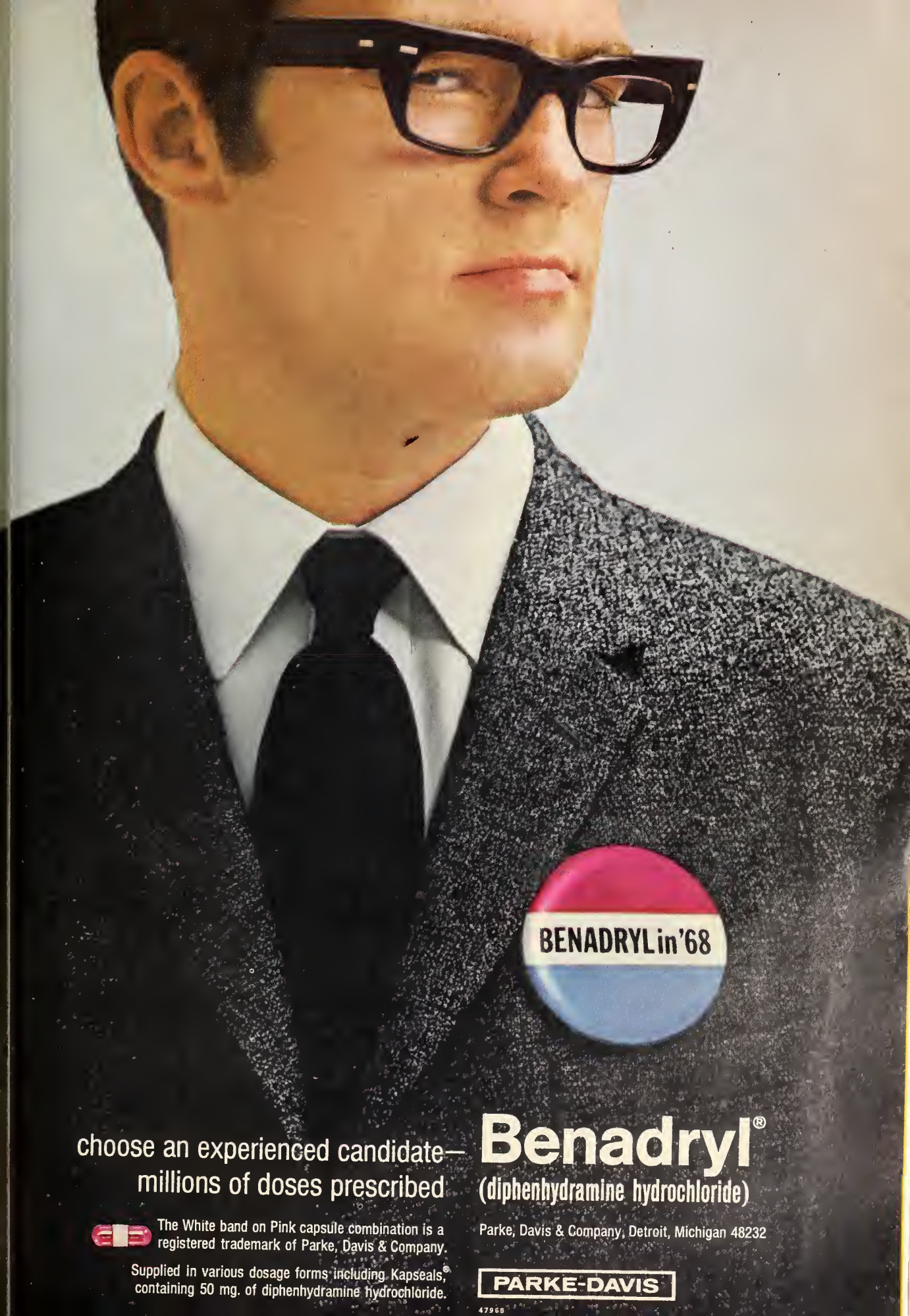
Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within th recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in female than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticari type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significa disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl) 25 mg. t.i.d.

for moderate to severe anxiet and mixed anxiety-depressio

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J.



choose an experienced candidate—
millions of doses prescribed

Benadryl®
(diphenhydramine hydrochloride)

The White band on Pink capsule combination is a registered trademark of Parke, Davis & Company.

Supplied in various dosage forms including Kapseals,® containing 50 mg. of diphenhydramine hydrochloride.

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

47968

When it's more than a bad cold



your patient can feel better while she's getting better

Achrocidin®

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

In tetracycline-sensitive bacterial infection complicating respiratory allergy, ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

349-B



the spasm
reactors
your practice
deserve

"the Donnatal® Effect"

	each tablet, capsule or 5 cc. of elixir (23% alcohol)	each Donnatal No. 2	each Extentab®
amine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
ne sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
ne hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
arbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
ng: may be habit forming)			

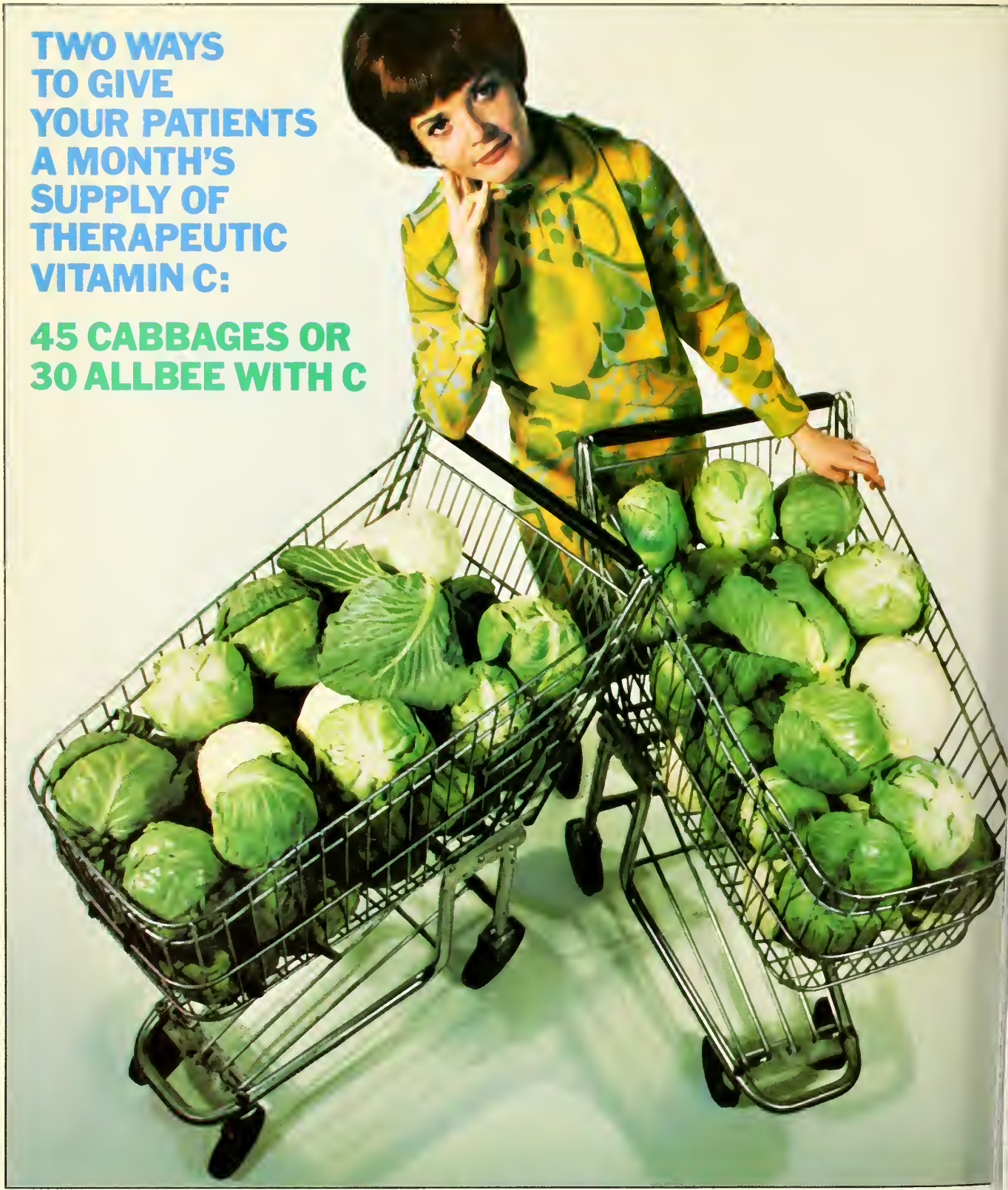
Brief summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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American Map Co., Inc., New York, No. NY 388

See inside fold for product summary

Effectiveness: ACHROMYCIN Tetracycline is a crystalline broad-spectrum antibiotic which provides effective therapeutic activity against susceptible microorganisms.

Contraindication: History of hypersensitivity to tetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Some patients may develop a photodynamic reaction to natural or artificial sunlight. Those with a history of photosensitivity reactions should avoid direct exposure to sunlight while under treatment. Discontinue drug at first evidence of skin discomfort.

Precautions: Use may result in overgrowth of nonsusceptible organisms. Constant observation is essential. If new infections appear, take appropriate measures. Use of tetracycline during teeth development may cause discoloration of teeth.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity reaction, onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose-related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels have been reported following full therapeutic dosage. This symptom has disappeared rapidly when drug is discontinued. Teeth—dental staining (yellow-brown) in children of mothers given tetracycline during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. Tetracycline may form a stable calcium complex in bone-forming tissue. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: One Gm. per day, in 4 divided doses of 250 mg. each. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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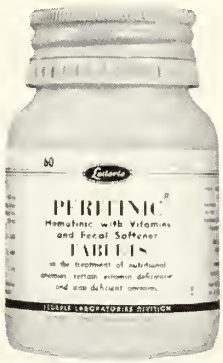
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Vitamin B_6	7.5 mg
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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido--all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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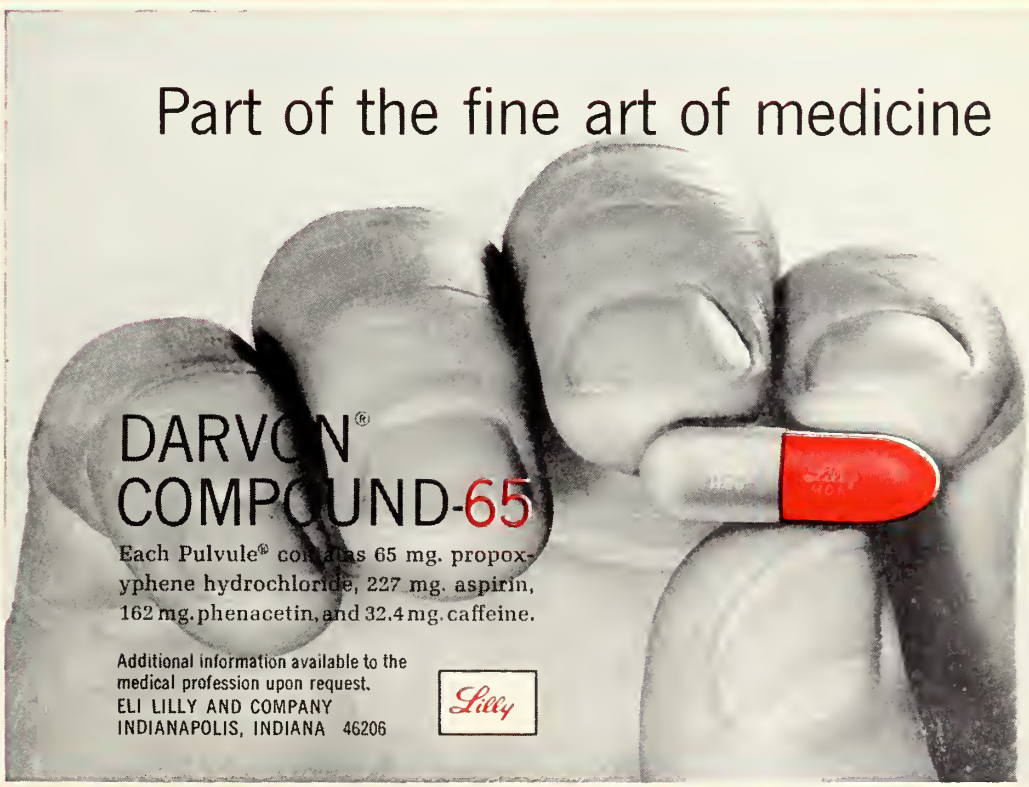
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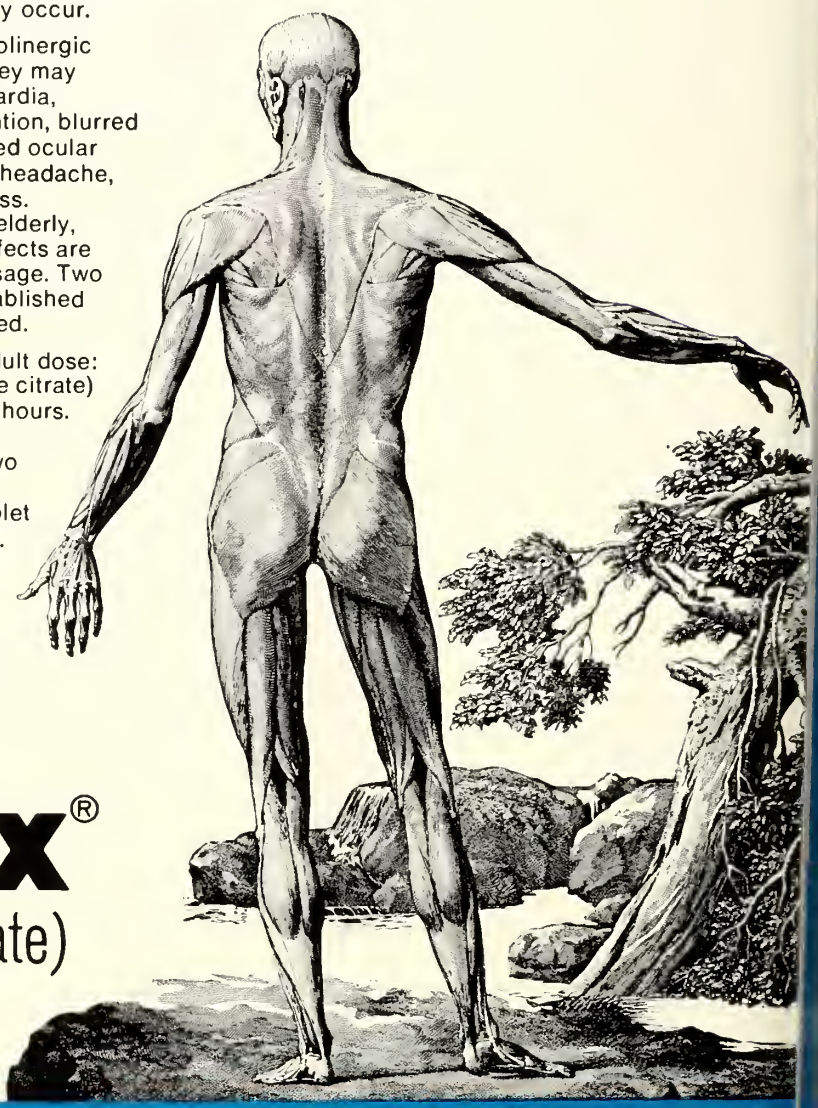
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

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Fort Washington, Pa.



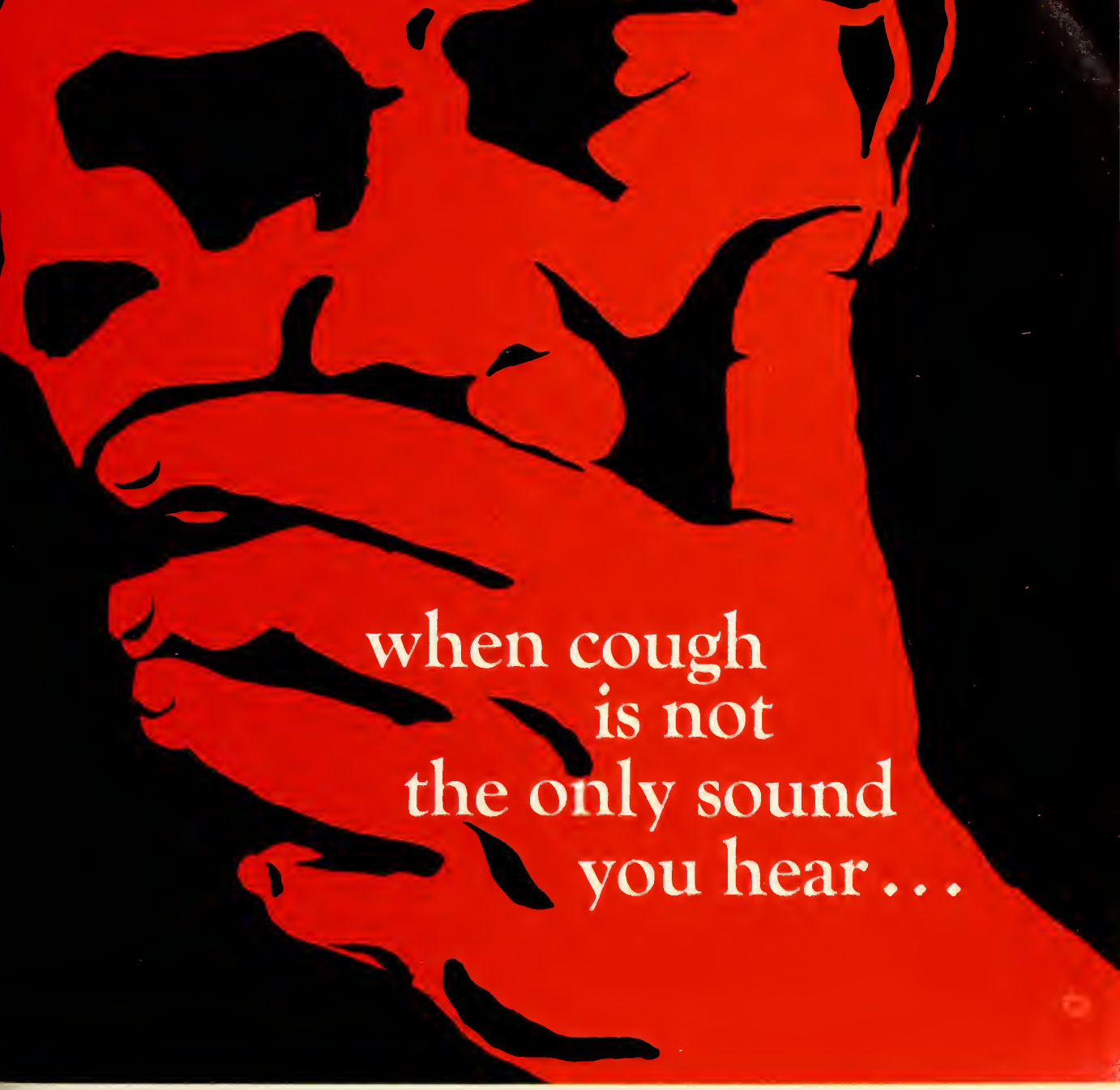
PROOF POSITIVE

Diet-Rite Cola...America's Number One low-calorie cola... no sugar at all...less than one calorie per bottle...the one with the wonderful taste of cola...pH approximately 2.6 to 2.8...same general range acidity as other cola beverages plus number of fruit juices.

You will like Diet-Rite Cola. So will your patients.

Royal Crown® Cola Co. Columbus, Georgia

"DIET-RITE" IS A TRADEMARK OF ROYAL CROWN COLA CO. REG. U.S. PAT. OFF. © 1967 ROYAL CROWN COLA CO.



OMNI-TUSS® b.i.d.

. . . **because** OMNI-TUSS is indicated for cough associated with upper respiratory tract infections, bronchitis, bronchiectasis, bronchial asthma, emphysema, sinusitis and rhinitis, hay fever, or other allergic conditions. Any of these conditions may exhibit the general symptom syndrome—coughing, wheezing, bronchospasm, and tenacious mucus—which may benefit from the antitussive, bronchodilative, antihistaminic, and expectorant action of Omni-Tuss.

The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

Strasenburgh

Strasenburgh Laboratories Division
Wallace & Tiernan Inc., Rochester, N.Y.

In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl) 25 mg. t.i.d.

for moderate to severe anxiety and mixed anxiety-depression

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J. 68-1


on call...
Keflin®
Sodium
Cephalothin
℞ KEFLIN®
SODIUM
CEPHALOTHIN
4 Gm.
AMPOULE No 738
Lilly
Eli Lilly and Company
Indianapolis, Indiana 46206



"The inconvenience of a cold"

For a cold, NTz® Nasal Spray provides rapid relief of nasal symptoms. Relief starts with the first spray which opens the inferior part of the common meatus. A second spray, a few minutes later, will shrink the turbinates to help provide sinus drainage and ventilation. Dosage may be repeated every three or four hours as needed, for temporary relief of symptoms. NTz is well tolerated but overdosage should be avoided.

As a sinusitis deterrent, NTz Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

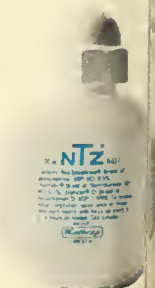
Supplied: NTz Nasal Spray, plastic squeeze bottles of 20 ml.; NTz Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTz is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.



Winthrop Laboratories, New York, N.Y. 10016 Winthrop



"All Registered Nurses are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards. Therefore, all registered nurses are alike.

That's nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike. you can say. with confidence, that it just isn't so.

You might also say that all registered nurses aren't alike, either.





Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

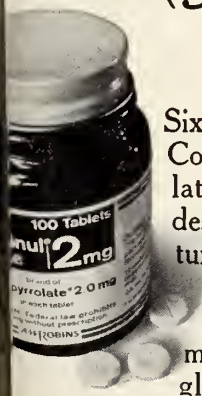
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.); Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

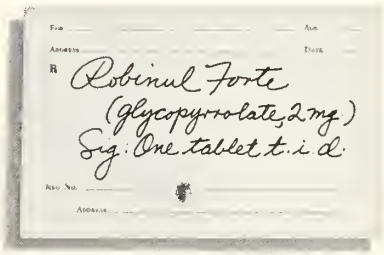
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) d good acceptance among numerous physicians, y others just didn't seem to want to give it a try, ably because the anticholinergic they were al- y using was giving acceptable results.

ever, we believe you'll agree there's always for a better anticholinergic. This is why we're g you to give Robinul Forte a fair trial. Robinul exerts a highly specific antisecretory action and ed inhibitory effect on intestinal tone. We're con- d you'll agree that this is indeed an outstanding when you observe its outstanding suppression of symptoms. Furthermore, it is unique in that it es intestinal tone, yet has little or no effect on talsis. In addition, the incidence of the more rsome peripheral side effects is low.

nger does the physician have to look for extreme nouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.

This advertisement for TAO® (triacetyloleandomycin), published at the request of the Food and Drug Administration, replaces a recent one which the FDA regards as misleading.

The advertisement headlined "new evidence for TAO . . ." and emphasized that the drug is "for the frequently seen respiratory infection in the office and for a problem pathogen* in the hospital. *Staphylococcus aureus."

We emphasize that triacetyloleandomycin is to be used only for acute, severe bacterial infections where adequate sensitivity testing has demonstrated susceptibility to this drug and resistance to other less toxic agents. In view of the possible, but reversible, jaundice and hepatotoxicity of this drug, other less toxic agents should be used unless the organism is resistant to those agents, or in those cases where hypersensitivity precludes their use.

TAO is contraindicated in preexisting liver disease or dysfunction, and in individuals who have shown hypersensitivity to the drug.

The advertisement emphasized that no tooth staining has been reported after ten years of use of this antibiotic. The Food and Drug Administration regards this claim as an implied comparison suggesting that triacetyloleandomycin and tetracycline have a similar antibacterial spectrum of effectiveness, and that TAO has less toxic potential. Any such implication is not intended and, of course, would be invalid.

The advertisement referred to a research study in which patients were given triacetyloleandomycin prior to determining the susceptibility of the offending organism. Any suggestion that triacetyloleandomycin be used clinically without first determining susceptibility of the offending organism should be disregarded.



J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
235 EAST 42nd STREET
NEW YORK, N.Y. 10017

TAO®(triacetyloleandomycin)
Brief Summary

INDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents.

CONTRAINDICATIONS: Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug.

PRECAUTIONS: CAUTION: USE OF THIS DRUG MAY PRODUCE ALTERATIONS IN LIVER FUNCTION TESTS AND JAUNDICE. CLINICAL EXPERIENCE AVAILABLE THUS FAR INDICATES THAT THESE LIVER CHANGES WERE REVERSIBLE FOLLOWING DISCONTINUATION OF THE DRUG.

Not recommended for prophylaxis or in the treatment of infectious processes, which may require more than ten days continuous therapy. In view of the possible hepatotoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgment dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including dark-field examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

ADVERSE REACTIONS: Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions.

ROERIG Rx

J.B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
235 EAST 42nd STREET
NEW YORK, N.Y. 10017

Q. How much does the **anticostive*** **hematinic** cost?

A. No more than costive hematinics cost!

The anticostive hematinic is

PERITINIC®

Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:

● Elemental Iron (as Ferrous Fumarate)	100 mg
● Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

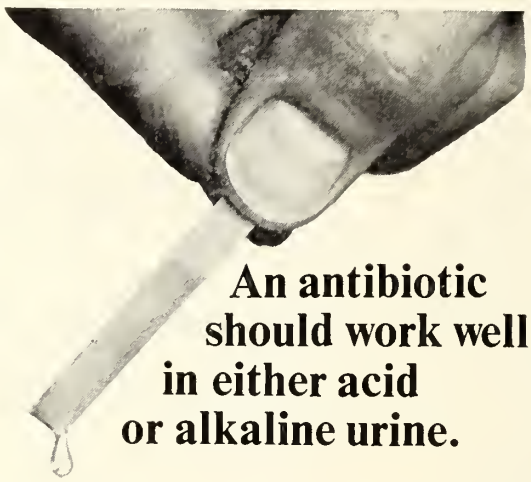
Bottles of 60

*

anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic?

Lederle LEDERLE LABORATORIES
A Division of American Cyanamid Compan·
Pearl River, New York 10965

490-7R-6064



An antibiotic should work well in either acid or alkaline urine.

It isn't always necessary to adjust urinary pH in treating G.U. infections.

Not when the causative organism is a strain sensitive to DECLOMYCIN® Demethylchlortetracycline, as is often the case.

DECLOMYCIN remains stable and active in either acid or alkaline urine. So there's no need to acidify the urine to keep the antibiotic at work.

Why match the urine to the antibiotic...when you can match the antibiotic to the urine...by prescribing DECLOMYCIN. A b.i.d. dosage makes therapy convenient for your patient.

Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

Capsules: 150 mg; Tablets: film coated – 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.

355-B

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

The Bettmann Archive



Just one tablet at bedtime • Prevents painful night leg cramps • Permits restful sleep

How many of your patients stamp their feet at night and lose sleep because of painful leg cramps? Unless prompted, they usually fail to report this distressing condition and suffer needlessly.

One tablet of QUINAMM at bedtime usually controls distressing night cramps and permits restful sleep with the initial dose.

Prescribing information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Side Effects/Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl.

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Contraindications: Glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction.

Precautions: Use cautiously in the presence of hypertension, hyperthyroidism, coronary artery disease; warn vehicle or machine operators of possible drowsiness.

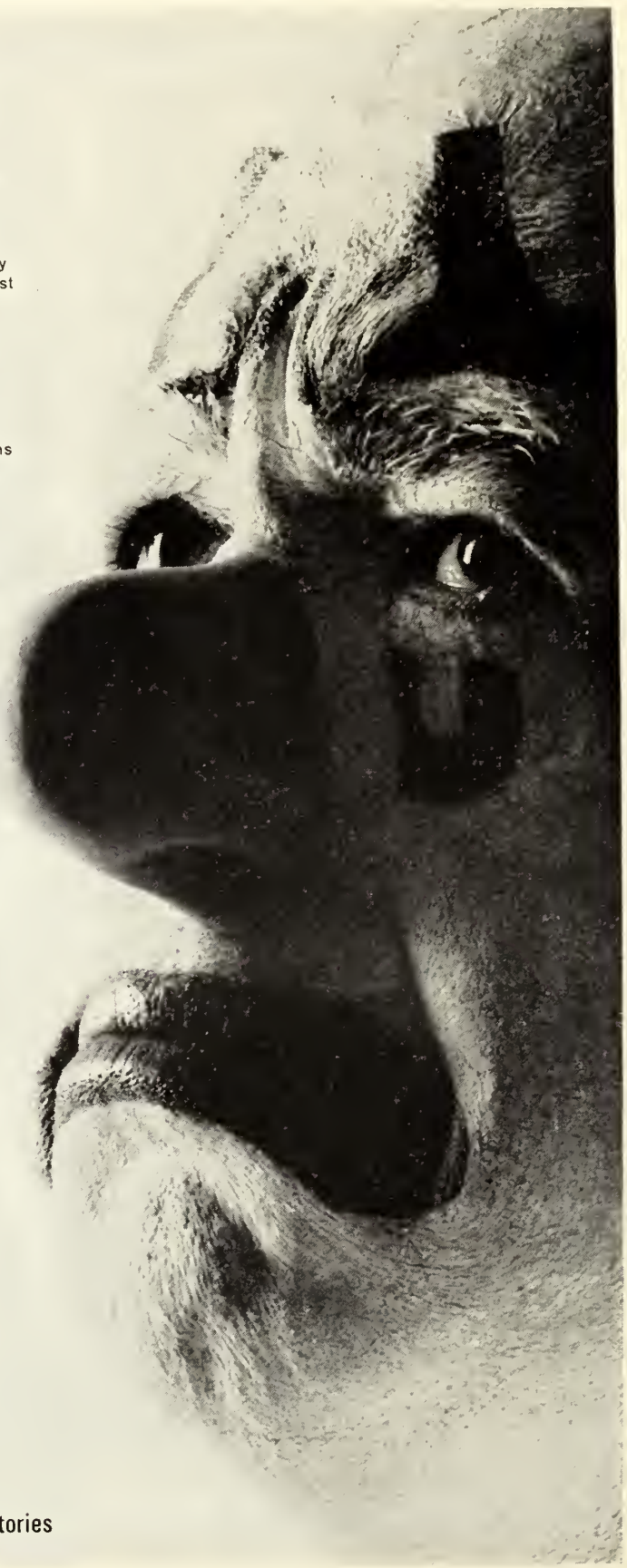
Usage in Pregnancy: Use in pregnancy, nursing mothers and women who might bear children only when potential benefits have been weighed against possible hazards.

Note: The iodine in isopropamide iodide may alter PBI test results and will suppress I^{131} uptake; discontinue 'Ornade' one week before these tests.

Adverse Reactions: Drowsiness; excessive dryness of nose, throat or mouth; nervousness; insomnia. Other known possible adverse reactions of the individual ingredients: nausea, vomiting, diarrhea, rash, dizziness, fatigue, tightness of chest, abdominal pain, irritability, tachycardia, headache, incoordination, tremor, difficulty in urination. Thrombocytopenia, leukopenia and convulsions have been reported.

Supplied: Bottles of 50 capsules.

a stuffy nose is no laughing matter



Ornade® Trademark

Each capsule contains 8 mg. of Teldrin® (brand of chlorpheniramine maleate), 50 mg. of phenylpropanolamine hydrochloride, and 2.5 mg. of isopropamide, as the iodide.

Spansule® Capsules

brand of sustained release capsules

each one can give him all-day or all-night relief of nasal congestion

SK&F Smith Kline & French, Laboratories

The Journal
of the
South Carolina Medical Association

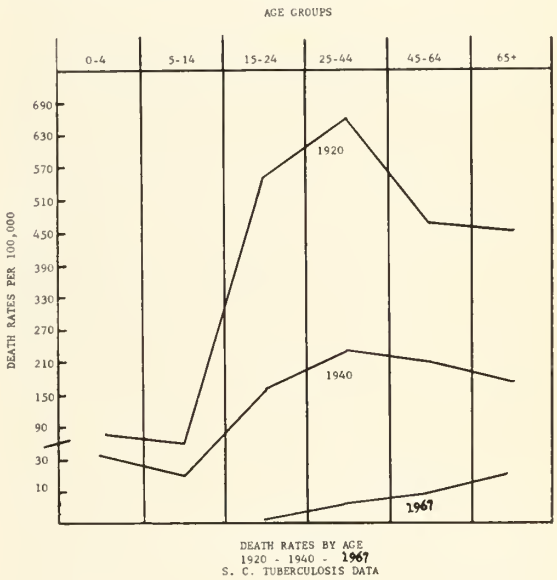
VOLUME 64 OCTOBER, 1968 NUMBER 10

TUBERCULOSIS TODAY IN SOUTH CAROLINA

DAVID B. GREGG, M.D.
Columbia, S. C.

It is the purpose of this paper to comment on the status of tuberculosis in South Carolina at this time and in a brief way to outline the present approach to the problem of control of this disease now in progress.

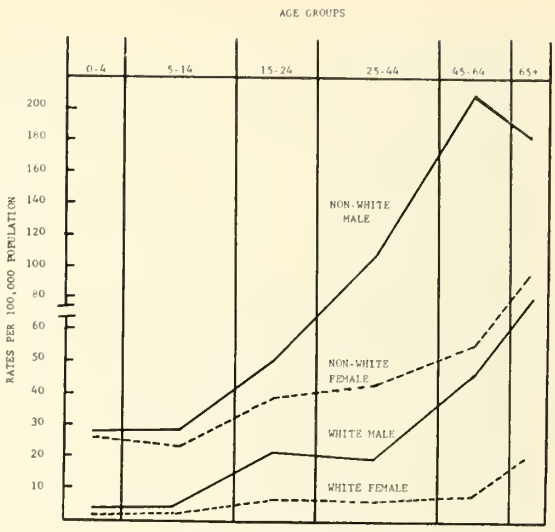
Taking a backward glance, tuberculosis, once the leading cause of all deaths, dropped from this dominant position in the late teens of this century and by 1955 dropped from among the top ten in South Carolina. Today it is about 20th among the causes of death and perhaps this position is sustained only by the present system of coding, which counts as a tuberculosis death any certificate which shows this disease to be present, even though unrelated to immediate cause of death. Even so, death rates have continued to decrease, about three per cent per year from the teens of this century to about 1950, and, due to the impact of chemotherapy, rather rapidly, about 10 percent per year, since then. With a decline of from 200 per 100,000 to less than five, or a 98 per cent decrease, mortality rates are no longer a useful index of the magnitude of the problems in tuberculosis. This is graphically illustrated in the first chart which shows death rates for 1920, 1940 and 1967 by age groups. Even though the actual number of deaths has increased in the past two years, 1966 and 1967, for the reasons mentioned they are not a valid indicator of the disease. Even with these increases the rate remains 4.7 per 100,000 in South Carolina, compared with the provisional figure of 3.9 for the nation as a whole.



The incidence of newly diagnosed active cases of tuberculosis has also shown decreases, but has generally lagged behind the decline in deaths and, in South Carolina, has shown actual increases in recent years. Excluding the artificial rise in new case rates in 1962, coincident to the inclusion of active primary cases for the

first time in that year, there have been two years since 1954 with actual increases in new active cases of tuberculosis—1965 with nearly 11 percent increase and 1967 with 3.8 per cent. Even with the slight increases the new case rate for 1967 is provisionally 28.7 for South Carolina, compared with the provisional rate of 24.5 for the entire nation in 1966, the latest national figure available. It is felt that even these increases are due more to better case finding techniques, especially the surviellance of all contacts of newly diagnosed cases of tuberculosis, and thereby finding cases earlier rather than at some later date and probably in a more advanced, contagious stage.

Chart No. 2 shows graphically the rates of new active cases of tuberculosis by age group, by sex, and by race for the year 1967 in South Carolina. The columns representing age groups are proportionate to the percentage of the total population they represent. It can be seen that the rates of the 0-4 year olds have decreased so much that, especially for the whites, there is no longer the drop in the 5-14 age group which has been cited as evidence of the relative immunity to the disease during this period. Only in the Negro females among this age group is there a vestigial remnant of the once sharp drop in this category. In the 15-24 age group there are increases in all categories, greatest in the males of both races and greater in the Negro females than the white females, a fact which continues to support the relative immunity of the 5-14 year old group. In all categories except the Negro males there is a flattening trend in the curve to the 25-44 age group. The sharpest rise of all was among the Negro males in the 45 to 64 age group with a somewhat lesser rise among white males. Even though there are increases in the females in the 25-44 age group the greatest rise for females of both races occurred in the 65-and-over group. The white males also showed their highest rate in the oldest age



S. C. TUBERCULOSIS DATA - 1967
CASE RATES BY AGE, SEX AND RACE

group, while among the Negro males there was a slight drop from the peak in the 45 to 64 year old group, even though the rate for Negro males over 65 is still much greater than in any other category.

As for the methods now in practice for tuberculosis control, many are the same that have been in existence for nearly half a century, though with marked change in emphasis: Others have been added in recent years, with the changes, for the most part, directly related to refined techniques and availability of drugs both effective in treatment and as a preventive in those at high risk of developing tuberculosis. Adequate treatment of all known active cases of the disease remains the first priority. Today the emphasis is on effective drug treatment with or without hospitalization. The isolation in a hospital to prevent spread of the disease to others during the once long period of infectiousness has becomes less of a necessity due to the rapid conversion to non-infectiousness by drug treatment. Three-fourths of the adequate treatment period of tuberculosis can and should be carried out outside the hospital. In 1960 only 60 per cent of the 2,247 known active cases of tuberculosis were on drug treatment, due perhaps to the concentration of treatment in hos-

pitals; since 1965, with improved outpatient clinic services, evaluation of this phase of control continues to show that from 85 per cent to 90 per cent of all active cases, now totaling 1,028, are on drug treatment. Considerably more than half, 544, are under treatment outside the hospital.

In addition to the treatment of those with active disease nearly three times as many are followed with sputum examinations, x-ray films, and continued drug treatment as necessary until the case is inactive for at least five years. On December 31, 1967, there were 2,958 such cases other than active; 2,583 were inactive, 163 quiescent, and 212 with activity undetermined on last report.

Emphasis has been placed on bacteriologic examination in diagnostic studies, determination of effectiveness of drug treatment and surveillance of inactive cases. Bacteriologic relapse is often the first indication of reactivation and, of course, an indication of infectiousness and probable development of resistance to current drugs if still under treatment. Drug sensitivity determinations are a necessity in this instance to plan effective retreatment, and, when available on all original cases, often save months of ineffective treatment and consequently longer periods of infectiousness. This increasing dependence on sputum examinations is reflected by the increase from 5,682 cultures for acid fast bacilli by the State Board of Health Laboratory Division in 1960 to the present level of over 12,000 annually. It is of interest, that there were 687 cultures positive for M. tbc. in 1960, or 12 per cent; in 1967 there were only 498 positive, only 4 per cent. This is a hopeful indication that there are fewer tubercle bacilli in circulation to infect individuals in 1967 than there were in 1960.

The old adage that a high index of suspicion is necessary if one is to be proficient in the diagnosis of tuberculosis is nowhere more clearly demonstrated than in the results of thorough follow-up of some 1,021 persons designated as "tuberculosis suspects' on the basis of abnormal x-ray findings. One hundred eighty-two (182) were proved to have tuberculosis, or nearly 18 per cent. There were 90, or slightly less than 9 per cent, in whom no definite diagnosis was made within a six month period. In view of the high yield in this category every effort is being made to complete diagnostic studies and observations necessary to make a definite diagnosis in all suspect cases as early as possible, certainly within a six month period.

Identification and examination of all individuals living in the home of every newly diagnosed case of tuberculosis and also all other close and casual, social, or work contacts is our highest priority in case finding methods. In 1967 four thousand fifty-four (4,054) contacts were identified and 3,720 were examined by x-ray, tuberculin test, or both. This was nearly 92 per cent of identified contacts. There were 81 new active cases of tuberculosis found among the 3,720 persons examined for a case rate of 2,177 per 100,000. This is nearly eightyfold the incidence in the population as a whole. One thousand of these contacts were actually living in households with a newly reported active case, and of the 904 (90.4 per cent) of these who were examined, 29 were found to also have active tuberculosis. This is a case rate of 3,208 per 100,000 or 113 times the rate for the state as a whole. These figures document the high risk of tuberculosis in contacts and justify our selection of this group as top priority for receiving isoniazid prophylactically in an effort to decrease development of overt disease. Over one-third (1,358) of the identified contacts in 1967 were given isoniazid, and of the 904 household contacts 485, over half (53.7 percent) received prophylactic treatment with isoniazid. More will follow about the procedure of isoniazid prophylaxis itself further on.

Of course, no tuberculosis control pro-

gram is complete without screening case finding activities and these may generally be divided into x-ray services and tuberculin testing. The former we attempt to direct to the high risk individuals in the following priorities: (1) contacts—household and other, (2) general hospital admissions, (3) medical and surgical clinic patients, (4) physician referrals, (5) males over 45 years of age, (6) low socioeconomic groups (7) self referrals—symptomatic and (8) population in general over 15 years of age. In 1967 a total of 246,907 screening x-ray films were made in South Carolina. By far the majority (141,852) were made in Health Department Chest Clinics; most of the remainder (93,376) were made by the two State Board of Health Mobile x-ray units, with only 11,479 being made as routine admission films in hospitals. This last category should be vastly increased. The final 14,966 are from a stationary photofluorographic unit operated by the local tuberculosis association in Spartanburg County. Through the screening films done by the Health Department Clinics, 41 per cent of the 716 new active cases of tuberculosis in 1967 were reported by Health Department Clinics. Physicians reported 25 per cent and general hospitals 20 per cent, with deaths, transfers and other institutions accounting for the remaining 14 per cent.

The specificity of tuberculin testing has now been further enhanced by the availability of a purified protein derivative antigen prepared from the Battey-M avian strain of atypical mycobacteria. It is now possible by careful measurement of induration of reactions to the standard PPD-S and, in the case of doubtful reactions of 5 to 9 mm, by simultaneous retest with 0.0001 mg intradermal injections of PPD-S and PPD-B in separate sites, to differentiate definitely the reactions caused by injection with M. tuberculosis and those caused by the atypical mycobacteria.[1] Reactions of over 10 mm induration to 0.0001 mg PPD-S are felt to indicate true tuberculin sensitivity in South Carolina. Those with reactions of 5 to 9 mm induration, which on simultaneous retest with PPD-S and PPD-B have larger reactions to the former, are also felt to represent evidence of infection with tubercle bacilli. In retest, where PPD-B is larger by 2 mm or more and the PPD-S is under 12 mm, it is felt that the reaction is nonspecific due to infection with some of the atypical mycobacteria and no further supervision is needed for tuberculosis control purposes. With this refinement the tuberculin test becomes even a more specific test and is much more useful in pinpointing those in need of follow-up studies who might benefit from isoniazid prophylaxis. In 1967, sixty-three thousand four hundred sixty-eight (63,468) tuberculin tests were given and read in local health departments or by public health nurses. A total of 5.6 per cent (3,530) were over 10 mm induration and considered positive, 5.2 per cent were doubtful—5 to 9 mm induration and 89.2 per cent were negative—0-4 mm. There were a limited number of tuberculin surveys done in schools in South Carolina in 1967. Among pre-school and first graders, 11,758 tests were done. Only 8,755 were read and of these 254 or 2.99 per cent had over 10 mm induration and were considered positive. Most of these children were treated with isoniazid following x-ray examinations. Their household associates were also screened by tuberculin test and x-ray and several cases of pulmonary tuberculosis have been uncovered in this manner. We have record of only 1,348 high school children tested and 102 or 7.91 per cent were positive with over 10 mm induration. Of 393 school employees tested, those with reactions over 10 mm increased to 11.15 per cent.

Isoniazid prophylaxis is being used increasingly in tuberculosis control. Since the United States Public Health Service INH Prophylaxis Trials have now proven

that the risk of developing tuberculosis can be decreased in high risk individuals by 77 percent during the years of medication[2] and with a cumulative reduction over the now ten years observation of over 50 per cent,[3] there can be no reasonable doubt of its effectiveness in decreasing new cases of tuberculosis. And as so aptly stated by Ferebee, "Without the use of prophylaxis, in conjunction with other control measures, eradication is simply a topic of conversation, not a real possibility." [2] In addition to the 1,358 persons placed on prophylactic treatment with isoniazid because of history of contact, nearly twice as many, 2,612, were treated for other high risk indications. These included tuberculin converters of all ages, infants and children to school entrance age with positive tuberculins, all males with over 10 mm induration to 0.0001 mg PPD-S, all of those with 15 mm or larger reactions to the same strength test and those with a positive tuberculin and coexistence of such predisposing factors as diabetes mellitus, silicosis and prolonged steroid therapy. In the hope of encouraging more widespread use of isoniazid prophylaxis the schedule for its recommended use in health department chest clinics, or for all physicians who may wish to join in striking a blow for tuberculosis control, follows as an appropriate close of this discourse.

Quick Reference for INH Prophylaxis

Patient	Initial Positive Policy	Retest	Drug Duration Months	Repeat x-ray 3*	6*	12
Infants and Children Under 6	12 mm	6-11 mm	12	Yes	Yes	Yes
Recent Converter	12 mm	6-11 mm	12	Yes	Yes	Yes
*All Contacts	6 mm	None	12	Yes	Yes	Yes
Patients on Long Term Steroids	6 mm	None	12	Yes	Yes	Yes
Any Person	15 mm	None	12	Yes	Yes	Yes
Males over 45 Years of Age	10 mm	6-9 mm	12	Yes	Yes	Yes
Diabetics or Silicotics	6 mm	None	12	Yes	Yes	Yes
*Contacts With Negative Reaction at 3 and 6 Months	None	None	6	Yes	Yes	Yes

*If original film is negative, 3 and 6 months film may be photofluorogram.

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ACUTE RESPIRATORY DISEASE MORBIDITY

PATTERNS AT A MILITARY COLLEGE

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Acute respiratory disease ranks first among the causes of morbidity in the United States as a whole and in our colleges and universities.[1-2] This report describes acute febrile respiratory disease morbidity patterns of the last five academic years at The Citadel, a military college in Charleston, South Carolina.

Materials and Methods

Setting and population at risk: The Corps of Cadets is composed of 2,000 able bodied young men assigned to one of 17 companies. Four or five companies form a battalion and each battalion is quartered in a separate barracks. Two cadets share a room in their company area of a barracks. However, all cadets eat in a common dining hall and cadets from any company may be found in a single classroom. Although 40 per cent of the Corps are South Carolinians, cadets originate from 45 states and five foreign countries. Freshman cadets enter as a class each September; consequently, there is little input of new cadets at any other time.

Record survey: Hospital admissions during the academic years 1962-63 through 1966-67 were searched and respiratory cases tallied. In addition, admissions for the years 1965-66 and 1966-67 were partitioned into respiratory or non-respiratory categories. The Citadel Hospital provides all primary medical care for cadets during the school year. Moreover, school policy requires hospitalization of any cadet with an oral temperature of 100°F or more at early morning sick call or 101°F or more later in the day.

Clinical studies: During two typical periods of endemic respiratory illness, February through April, 1967 and September-October, 1967, the authors studied and cared for 130 Citadel hospital patients admitted because of febrile respiratory illness. Clinical diagnosis of these cases was assigned on the basis of predetermined criteria by consulting medical history and physical examination data.[3]

Laboratory: Admission throat swabs were immediately streaked onto sheep blood agar plates which were inspected after 24 and 48 hours incubation for streptococcal-like beta hemolytic colonies. Streptococcal grouping was then attempted by a direct fluorescent antibody technique.[4]

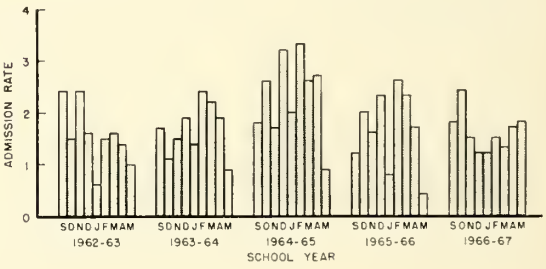


Figure I

Admission throat washings of trypticase soy broth containing 0.4 per cent human albumin were preserved at—70°C. A score of selected washings were inoculated into chick embryos or onto tissue culture mono-layers. The cell lines inoculated were Hep[2], WI38 and primary monkey kidney.

Acute and convalescent sera were collected and stored at 4°C. All paired sera from February-April, 1967, have been

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titered against influenza A and B, parainfluenza 1 and 2, adenovirus group antigen, and respiratory syncitial virus by complement fixation.[5] Antigens were obtained from the National Communicable Disease Center or from commercial sources.

Table 1

Total and Respiratory Admissions to The Citadel Hospital During 1965-1966 and 1966-67 Admissions

School Year	Total No.	Total Rate/ 100/ Month*	Respiratory No.	Respiratory Rate/ 100/ Month	Percentage of Total Admissions
1965-66	882	5.6	259	1.6	29.4
1966-67	855	5.5	256	1.6	29.9
Both Years	1737	5.6	515	1.6	29.6

*Adjusted to compensate for holidays, months of more or less than 30 days, and changes in size of the Cadet Corps.

Results

Total admissions and respiratory admissions: Just over 850 total admissions and 250 respiratory admissions were tallied in each of two non-influenza years, as shown in Table 1. The total monthly admission rate was 5.6 per 100 while the monthly respiratory admission rate was 1.6 per 100. Thus respiratory admissions accounted for 30 per cent of the total.

Temporal pattern: Adjusted* monthly respiratory admission rates during a five academic-year period are plotted in the histogram of figure 1. The 1964-65 school year has higher admission rates than the other four years which appear similar to each other. No clear seasonal pattern emerges from any one year.

Adjusted mean monthly respiratory admission rates for the five year period are plotted in figure 2. The rates of January and May appear to be much lower than any others. Late winter and early spring rates appear to be somewhat higher than do rates of fall and early winter but again there is no definite seasonal pattern.

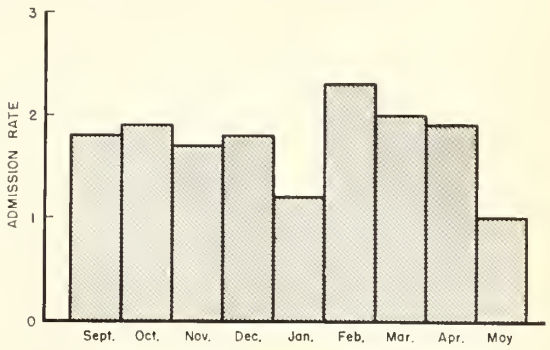


Figure II

During four of the five last school years respiratory illness experience did not significantly differ over the four barracks. However in 1964-65, an influenza year, respiratory illness did differ significantly ($.02 > p > .01$) over the four barracks, as shown in Table 2. About 100 excess respiratory illnesses occurred during this influenza year.

Examining respiratory illness experience by barracks over an entire year might hide differences observable in small outbreaks. When such experience for an endemic period of illness, February through March 1967, was analyzed, no significant difference was noted. However, during September-October 1967, definite differences in respiratory illness rates were apparent with two barracks having mild outbreaks.

Class patterns: It has long been postulated that "seasoning effect", i.e. more illness among recent arrivals, which is observed among recruits and in children's institutions, might also be a factor in the illness experience of colleges and universities.[6] Respiratory illness experience by class standing late in the 1966-67 academic year is examined in Table 3. Classes did not differ significantly in respiratory illness experience. However, that observation period might occur after seasoning had taken place; therefore, respiratory illness experience during the initial months

*Adjusted for holiday periods and change in size of Cadet Corps.

Table 2
Acute Respiratory Hospital
Admissions at The Citadel, 1962-63 through 1966-67
Distributed by Academic Year and Barracks

	Hospital Admissions by Year									
	1962-63		1963-64		1964-65		1965-66		1966-67	
Barracks	No.	Attack Rate/100	No.	Attack Rate/100	No.	Attack Rate/100	No.	Attack Rate/100	No.	Attack Rate/100
First battalion	64	12.0	66	13.4	74	15.0	59	11.9	62	12.6
Second battalion	57	9.2	76	12.2	124	19.9	67	10.8	65	10.5
Third battalion	58	11.7	61	12.3	91	18.4	66	13.4	69	14.0
Fourth battalion	56	11.3	52	10.5	66	13.4	68	13.8	60	12.1
Total Corps	235	11.2	255	12.1	355	16.9	260	12.4	256	12.2

of the 1966-67 year was similarly analyzed in Table 4. Again there is no increase in illness among freshmen and thus no evidence of a seasoning effect.

Clinical patterns: As shown in Table 5, upper respiratory illness, i.e. coryza, pharyngitis, and sinusitis accounted for three-fifths of all admissions. Lower respiratory illness, pneumonia and bronchitis, contributed one-tenth. Almost one-quarter of all cases presented the picture of acute undifferentiated respiratory illness with a predominance of constitutional symptoms and definite, though not striking, respiratory signs and symptoms. Infectious mononucleosis account for the remaining six per cent.

Table 3
Acute Respiratory Hospital Admissions
at The Citadel, February through April 1967,
Distributed by Class

	Population	Admissions	
Class	at Risk	Number	Attack Rate/100
Freshman	545	21	3.9
Sophomore	584	15	2.6
Junior	448	15	3.3
Senior	381	12	3.1
Total Corps	1,958	63	3.2

Laboratory: Serodiagnosis and isolation efforts in the first 63 cases were disappointing. No viral agents were recovered. Fourfold or greater rises in complement fixation antibody titer were found in twelve cases, five against parainfluenza 2, three against adenovirus group antigen, two against influenza A_2 and two against respiratory syncitial virus. Two patients had positive heterophil tests and no group A beta hemolytic streptococci were isolated. Thus only 22 per cent of these first 63 illnesses could be etiologically classified.

Discussion

Temporal patterns in febrile respiratory illness at The Citadel differed from those described in the National Health Survey or in other University studies.[1,2,7,8] Except for 1964-65, when influenza A_2 was present in the community, febrile respiratory illness exhibited little year to year variation. Community outbreaks of influenza A_2 in 1962-63 and influenza B in 1965-66 did not seem to affect the Cadet population. This might be explained by influenza vaccine which is administered to the Corps each fall. One may conjecture that the 1964-65 vaccine program was not as effective as in other years. Both the mean yearly respiratory admission rate of 13.0 per 100 Cadets and the respiratory contribution to total hospital admissions were remarkably similar to those observed by Evans at the University of Wisconsin.[7]

Table 4
Acute Respiratory Hospital Admissions
at The Citadel, September and October 1967
Distributed by Class

	Population	Admissions	
Class	at Risk	Number	Attack Rate/100
Freshman	571	27	4.7
Sophomore	566	11	1.9
Junior	473	18	3.8
Senior	386	16	4.1
Total Corps	1996	72	3.6

Seasonal variations in respiratory attack rates were dampened much more than

expected. One might expect that cadets would return from Christmas vacation with a variety of new respiratory agents and thus that January attack rates would soar. In fact, the opposite occurred. Respiratory attack rates were significantly lower during each January. Two factors might explain this. First, vacation may interrupt transmission cycles of a variety of agents already endemic at the school.

Table 5

Acute Respiratory Disease Hospital Admissions at The Citadel, February through April and September-October, 1967 Distributed by Clinical Diagnosis

Diagnosis	Admissions Number	Per Cent of Total Diagnoses
Coryza	24	18.5
Pharyngitis	45	34.6
Acute Undifferentiated Respiratory Disease	29	22.3
Bronchitis	6	4.6
Pneumonitis	6	4.6
Purulent Sinusitis	12	9.2
Infectious Mononucleosis	8	6.2
All Diagnoses	130	100.0

Second, examinations occur in January and the decreased rate may be in part artifact, as cadets might avoid sick call so that hospitalization would not interfere with examinations. The other month with a low admission rate is May. Respiratory illness usually decreases in late spring so that this finding might be anticipated. However, May is also an examination month and the May rate, like that of January, could be depressed by avoidance of medical care.

Homogeneity of attack rates for different barracks over four of the five years was not unexpected as all units intermingle in classes, sports, and extracurricular activity. Lack of homogeneity of barracks attack rates during 1964-65, might well be explained by differential influenza morbidity in a population with partial immunity. Excess respiratory admissions in that year totaled about 100 cases or five per cent of the total corps. This excess was actually greater as several score of influenza cases were treated in quarters rather than in the hospital. When barracks attack rates are viewed over shorter periods of time, two patterns emerged; cases either were uniformly distributed or sharp outbreaks were observed in one or two barracks and little illness in the others. These later sharp outbreaks could then die out without affecting other units, smoulder through the entire Corps, or erupt explosively.

An increased respiratory morbidity among freshmen, the seasoning effect, was not observed early or late in the school year. This observation probably means that respiratory flora of The Citadel resembles that of the open population. Thus cadets are seasoned before matriculation.

The clinical diagnosis pattern was similar to those of the National Health Survey and other university studies. Of the upper respiratory cases, purulent sinusitis occurred only as a complication of a previous non-febrile coryzal illness. Acute undifferentiated respiratory disease was observed more often than would be expected in the general population but less often than in recruit populations.[9-10]

Only about one-quarter of all illnesses could be etiologically classified. Since serodiagnosis of rhinovirus infection rests upon type specific neutralization testing, the portion of identified illness would probably have been increased if rhinovirus isolation could have been attempted on all throat washings and one or two such agents identified to furnish appropriate virus for neutralization testing. Serodiagnosis of scattered cases of adenovirus, parainfluenza, and respiratory syncitial infection are a common finding.[11] Serodiagnosis by complement fixation of two cases of influenza A without isolation of the virus must be viewed with caution as non-specific rises in titer can occur. Group A beta hemolytic streptococcal illness did not occur during the 1966-67 observation period but three such cases have been ob-

served early in the 1967-68 academic year. Nevertheless, the relative infrequency of streptococcal illness was surprising since streptococcal illness is an important cause of morbidity in other universities.[2] Infectious mononucleosis appeared to be a sporadic disease within the Corps.

Summary

Acute febrile respiratory morbidity patterns were studied at The Citadel for a five year period and clinical-laboratory observations were made for five months. Respiratory illness with a mean yearly incidence rate of 13 per 100 Cadets, accounted for 30 per cent of all Citadel Hospital admissions and appeared to vary little from year to year. Of three community influenza epidemics, only that of 1964-65 visibly affected the Cadet Corps morbidity. There was little seasonal variation in febrile respiraotry illness except for decreased rates in January and May. Evidence of illness outbreaks in single units of the Corps was detected in one influenza year, 1964-65, and in one of the two periods of intensive clinical observation. No freshman "seasoning effect" was detected.

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Outpatient Herniorrhaphy for Infants—H .B. Othersen, Jr., and H. W. Clatworthy, Jr. Amer J Dis Child 116:78-80 (July) 1968

Since 1957 an increasing number of patients under the age of 18 months who have adequate homes, stable parents, and suitable insurance programs were successfully handled by outpatient inguinal herniorrhaphy. The outpatient treatment has been identical to that of inpatient management except that they are cared for in the emergency room and discharged within two hours of the completion of surgery. Advantages of this procedure are the following: reduction in exposure of the infant to hospital personnel and the consequent decrease in nosocomial contamination and cross-illness; reduction in disruption of the family unit with minimal separation of child from the mother; reduction in hospital cost; reduction in hospital bed use; increase in use of emergency room facilities during the morning "slump period."

MEDICAL SCHOOLING IN SOUTH CAROLINA. XV.

STATUS QUO.

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In relating the story of "Medical Schooling in South Carolina" as published by the *Journal of the South Carolina Medical Association*[1] in separate articles, the impelling idea lay not merely in recording sequentially the course of the Medical College of South Carolina from 1823 to the 1960's, but in "taking it out of the pomp of history and making it the property of the affections." Although that purpose has been adhered to, the first article of the series was consciously thrown somewhat out of chronological order by exigency.

The particular occasion which timed that article for publication in September 1962 was revival of the move to establish a medical school in Columbia at the University of South Carolina. Although that effort failed soon afterward, it really just went underground. It has again (1967-68) come into open consideration—and with more strength than in the several previous attempts, in 1821-23, 1865-73, 1911-13 and 1944-47.

The conditions of the present era feed the near-hysterical demand for the creation of more medical school centers and expansion of those already in existence. There is even the beginning of talk about establishing a federal medical school, a West Point for Doctors, to ease the drain of medical personnel by the enormous military services as well as other federal operations. That voice is now low; it promises to become louder. As was said in that September 1962 article, "Why not?"

The population explosion, in which must be included the old as well as the young, both classes of whom have been increased by improved health and medical services, imposed upon an already short supply of medical personnel, has produced nationwide alarm over shortage of physicians, dentists, nurses and medical technicians. That condition cannot be sensibly cured in any short period of time or by any crash program.

This general shortage in the health and medical service fields has been accentuated by a number of other factors. The explosive advances in the sciences and their application to medical services have forced rapid changes in practice and in medical education. The social upheaval has brought with it the introduction of socialized (federal) medicine and the expansion of federal subsidization of research, education and service to unbelievable proportions. The related racial problem and its attending confusion and conflict will remain an unresolvable enigma under present dogma. These problems and conditions accompained by fantastic growth and inflation of the economy—and by WAR and rumors of war—create an atmosphere in which personal desire appears to be paramount in ordinary life.

While it cannot be said that the proposition of establishing a second state medical school, in Columbia, has made fast progress, there are indications that the pressures of the present might lead to hasty decisions. In the first article (1962) of this series, previously referred to, the present narrator discussed—belabored, really—the many factors involved, all still relevant. It was, and is, acknowledged that

*Accepted for publication July 1968.

a medical educational complex should have the "protective shelter" and the advantages of university connection. It was also stated as an "open secret" that in 1947 an offer was made to join the "go to Columbia" move provided the State would furnish the money to build from scratch the medical educational, service and research center as even then envisioned. It is also a secret—but open to only one other person—that in 1960 an understanding was reached that the Medical College of South Carolina should, and could, become the medical college, branch or center of the University of South Carolina, but that the proposal should come from the Medical College. That was after its Expansion Program had been successfully launched and the immediate building program matured. As was also said[2] in recording the aborted effort of 1952, which was designed to bring about a coordinated *university system* in South Carolina, the 1960 "conception produced a stillbirth." The investment of many millions of dollars by the Medical College as the *hub* of the Medical Center complex in Charleston and by the other institutions gathered around it, made the idea of moving to Columbia impracticable. Hence the switch to the concept there of a second state medical center connected with the University at Columbia, at first (1962) posed as a two-year (basic science) school.

When the unsoundness of the two-year school proposition, as publicized, was pointed out, and a full presentation published, spelling out the true situation as it then stood, the real objective was unmasked—a full-fledged medical school.

Since the major and popular interest in that proposition was in the production of more physicians, nurses and dentists, it provided the Medical College, now under a new administration, an opportunity to launch the next phase of the Expansion Program—replacement of the outmoded basic science, administrative and library quarters, and establishment of the School of Dentistry which had been authorized by the Legislature since 1953.

Under the pressure of popular demand, announcement was made in 1962 of prospective increase of the medical class size by another 50%, from 80 to 120. It had already been increased 100% by 1953, from 40 to 80, as a *desirable* goal of the Expansion Program. Under still another administration, presently it has been announced that in September 1969 the School of Medicine will begin admitting first-year classes of 102 members instead of 120. This reduced number is certainly a maximum under any economic prospect here—and perhaps even beyond the desirable for personalized teaching and training in a medical curriculum, at least here.

Moreover, under federal law forbidding racial discrimination and federal court mandate of actual racial integration, the Medical College has begun accepting Negro students. Also under pressure, but not governmental nor from South Carolina, the 1964-65 catalog of the school announced the acceptance of out-of-state applications, and for the last several years has enrolled some medical students who were not residents of the State. Lown and Jervey,[3] reporting on the demography of the medical classes enrolled here, state that "out-of-state applications were not accepted for processing until 1964-65."

Within the knowledge of the present narrator from personal participation from 1913 to 1960, and from any known record during the entire existence of the school, there has never been any action, rule or law restricting enrollment of students to resdents of South Carolina—nor, for that matter, has there ever been any rule of admission forbidding the consideration of applications on the basis of race, color, creed or nationality. So far as place of residence is concerned, from the very first class (1824), until after World War II, more often than not students from other states were enrolled here. It is true that consonant with the ending of World War

II and the launching of the Medical College Expansion Program there was born an unspoken, unwritten, unrecorded, unannounced and informal policy that so long as there were a sufficient number of acceptable and qualified South Carolina applicants to fill the limited enrollment, non-residents should not be accepted. With the return of young people to the ways of civilian life and with the attractiveness of the new Medical College Program to those who wished to study medicine, the institution found itself faced with many more worthy applicants from the state that supports it than the strictly limited number per class that it could accommodate. At a time when there was reported to be a general shortage of acceptable medical school applicants, South Carolina had a surplus, but while other medical schools reported their total number of applications (many of which went to several schools), South Carolina gave out only the number that it "processed."

At the present it is not foreseeable that any more than what might be considered a token of admission of Negro students will be accepted, unless some form of ratio integration may be federally forced. That is not to say that there is, or would be, faculty resistance; no true medical teacher harbors racial prejudice in his relations with students. However, present "efforts to recruit, admit and graduate members of racial minority groups" (RMG), as recited—and apparently promoted—in the Association of American Colleges news release of June 26, 1968, might well raise basic questions. Does our racial problem justify special (and therefore discrimination in reverse) supplementary programs of preparation and attention; does our medical situation require such crash programs—which always cause disruption and invite lowering of standards? It is a relief from some statements and implications in that release that at "most schools . . . RMG students [and presumably applicants] get individual attention in the same sense that all students receive individual attention."

Admissions, of course, govern production, and production of physicians, nurses and dentists is the harvest expected by the investors in public medical school operation—the people. As has been previously expressed in these articles, the promise of more doctors holds the purse strings of opportunity. Now, while the over-all operations conducted within a present-day medical educational complex compare economically with those of a large industry (it is the largest within the boundaries of the City of Charleston), it is somewhat galling to have the importance of it labeled editorially simply as a creator of jobs. Unfortunately that has too often been the most significant interest of a community in seeking for itself the location of a medical school—or a university.

As for out-of-state medical students, it may also be said that while applications will be processed, acceptance will also be no more than a token—unless there shall come another federal intervention based on financial subsidization. In fact the current catalog of the School of Medicine states that "preference is given to residents of South Carolina." Another deterrent to non-resident applicants is also continued, since 1963-64 their tuition fee has been $1,000, as against $500 for residents of the State. For the previous twelve years (1951-1963) it had been $1,500 as compared to $500. For the record, that fee was raised from $600 in 1944-45 through 1950-51 as compared to $400 for residents during that period; and previous to 1944 it was $400 against $250.

The General Assembly of 1967 created a South Carolina Commission on Higher Education, designed according to a newspaper article[5] as a "powerful new state commission . . . to supervise and guide state-supported colleges and universities," but actually only empowered as a study commission and advisor to state government on what has always been politically

and hopefully called a "State University System." More than once in these articles on "Medical Schooling in South Carolina" it has been pointed out that there is no such "System" but just six separate colleges, uncorrelated and more or less competitive. While it might appear that our effort of 1952, as recorded in this series of articles,[2] had been effective in the establishment of the Commission, interpretation into law takes control away from educators. The activities of the Commission thus far have been more provocative of debate than productive of correlative progress.

Surveys by experts in executive organization have been employed, and, in reference to medical education still another survey by a team of administrators in that field is said to have recommended the establishment of a second state medical school, at the University of South Carolina. Paraphrasing a comment recently made by a member of the U. S. Congress about the futility of Congressional procedure, the Medical College of South Carolina is being studied to death. Since 1960 there has been survey after investigation after survey, whereas between that year and 1944 the continuous and cooperative but informal study by top-level medical educators and authorities of the nation, invited by the institution itself, had produced unqualified endorsement of the Expansion Program we were launching during that time, together with unimpeachable harmony of administrative and teaching staffs in developing it.

Consonant with the demand of the public and government for the production of more and more medical service personnel and the kindred outcry for higher education at college level for everyone who can and will absorb it, an expanded concept in the whole field of education has now broadened the problem. At the same time the economy of the nation has suffered by free spending beyond government intake so as to bring about a serious threat to balance between demand and supply. "Too far too fast" has brought perplexity which requires wise decision to ensure that first things shall come first.

One of the ironic factors now precipitated into the educational dilemma affecting the medical school problem as well as the whole field of higher education in South Carolina is the situation of the College of Charleston. As was recorded[4] that institution was approached in 1822 by the group of Charleston physicians who were making their first attempt at establishing a medical school here, but the College declined to add a medical faculty. Now under duress, it has been considered, by at least one of the factions in the current confused bid for the establishment of a state university in Charleston, as the seeker of attachment to the Medical College.

The College of Charleston was the first municipal college to be established in North America. Although highly regarded in academic ranks, it never expanded beyond a strict baccalaureate curriculum. As a municipally supported college, it of course ran afoul of the United States Supreme Court's ruling of 1954 and the Civil Rights Act of 1964 against discrimination in its student admissions on a racial basis, and the enforcing order of integration—meaning requirement of admission of Negro students on the same qualifications as other applicants. Whereupon, financial connections between the College and the City of Charleston were severed, and in 1949 the institution became a private college, dependent upon student fees and such private contributions and endowments as were available to it.

South Carolina has now joined the trend throughout the United States of multiplication of publicly supported educational opportunity — prmary, secondary, collegiate, technical, professional and graduate. This movement is being carried on not merely by local improvement and expansion, but also by establishing additional institutions of higher education particu-

larly, regionally dispersed within the supporting state's boundaries. Connected with it in South Carolina—and adding force to the current—has come revival of the proposition of a second state medical school, and more. It has become (1967-68) a flood involving the two state institutions located here, the Medical College of South Carolina and the Military College of South Carolina (The Citadel), the College of Charleston and other interests—educational, medical, municipal, political and personal—in the promotion of the idea of establishing a state uinversity in Charleston. One of the hopeful interests has even proposed a name for it, "Carolina Southern University."

Cousonant with the announcement of its plans to resume the construction program contemplated in the Master Plan of the 1940's, but which had lagged since 1960, and for which the General Assembly of 1965 had provided some $6,000,000, to be joined with about $8,000,000 in federal matching, it was revealed that the organization of a school of liberal arts had already been started. In the meantime the training courses in medical technology which had been in operation for many years were translated into a school, with a dean. Also, the graduate courses which were initiated in 1949 as a "section" qualified to offer graduate work and degrees in the courses of the basic sciences of the medical curriculum were titled a school, with a dean instead of a chairman.

Thus, with schools of medicine, pharmacy, nursing, dentistry, graduate studies, paramedical sciences (technology)), as well as the proposed school of liberal arts, and a large increase of administrative personnel, the Medical College launched its campaign for "university status" on December 9, 1967. As a matter of record, in the Annual Report of the President for the year 1960, as well as in an article of this series on "Medical Schooling,"[2] the present narrator chose to call to attention that the Medical College had developed an organization, an administration and an operation of "univeristy type," with a president, vice-president and deans of all of the schools mentioned that had then been developed to the proportions and dignity justifying that academic status. There were then, in reality, the same schools as now, except in dentistry—which had been authorized (1953) but was awaiting construction appropriations. The only other school contemplated in the "Master Plan of the Expansion Program" was a school of public health; that promising and needed medical and health educational service has been missing from recent attention.

The use of the phrase "university type" in connection with the organization and development of the Medical College of South Carolina carried no thought of anything more than descriptive. The present narrator is also on record in these articles as well as elsewhere that it should be the medical and health unit—whatever title might be used, College, Branch, Center—of the University of South Carolina.

The heavily publicized bid of the Medical College for legislated university status, particularly in the local press, carrying with it the creation of the keystone of any university concept (by comprehensive definition) the basic school of arts and sciences, soon brought about such a confused and controversial situation that the General Assembly of 1968 adjourned without taking action to implement any solution. Connected by some interests in the overall university proposition—and disconnected by others—the College of Charleston individually sought to be taken over as a state owned and operated four-year college. As the matter now stands (July 1968), the Administration of the Citadel has been given what seems to amount to temporary advisory charge over the management of the College, while the Medical College failed to secure authorization or related appropriations for university status as well as for its proposed liberal arts college. Local sentiment, publicity and

political pressures seem to have centered more in rescuing the College of Charleston, and the whole situation involving the question of a state university for the "Low Country" and a second medical college in the "Up Country" is left unresolved—for further study, and promised solution "in 1969."

For the time being at least, a cut-off point to these writings appears to present itself. The over-all "Master Plan of Expansion developed during his administration and coming to fruition which we see today in the medical complex of the Medical College of South Carolina," according to Resolutions of the Board of Trustees passed October 13, 1967, and presented as a parchment scroll to the present narrator at the Annual meeting of the Alumni Association, May 14, 1968, has become a *fait accompli.*

As the next phase of the now open propositions for the establishment of another state university and of a second state medical school is awaited in uncertainty—and with some trepidation—the Medical College is moving ahead on the construction of new buildings to replace the inadequate old quarters of the administrative corps, the library, the basic science departments and student activities, as well as to provide for the new School of Dentistry. The grounds preparation is in progress on the recently acquired Porter Academy property directly in front of the Medical College Hospital. Preserved on those grounds will be two historic structures, St. Timothy's Chapel, re-dedicated as St. Luke's Chapel, and a little antique building named Hoffman Library, which will house the priceless old medical books, on permanent loan from the Medical Society of South Carolina, and other historic materials. Unfortunately the high brick wall surrounding these grounds had to be demolished along Doughty Street for the sake of continuity, while the Street itself has been closed from Ashley Avenue to President Street. The Medical Center is again "fresh out of ground," but good fortune and superimposed foresight have produced an intact campus of near-rectangular shape bounded by four city streets for a total distance of some two miles. Even the institutions and new establishments across the boundary streets are related in purpose or service—a large private hospital, nursing homes, rehabilitation institutes, medical office and apartment buildings, motor hotels, service stations and even a bank. The over-all outlay comprises the most impressive and comprehensive community within Charleston; about 150 acres in ground area now completely occupied by related, associated and affiliated institutions, of which the Medical College of South Carolina is the vital nucleus, "the HUB." Even if comparable opportunity could be found in one advantageous location within a populous community, a comparable medical center could not be accomplished at less cost than around the $150,000,000 level, or in less than 10-15 years' time. Bearing in mind that the section of the City in which this has been done was, in the early 1940's when the whole Plan was concocted, mostly an area of water, mud and marsh—the Ashley River's tidal reaches—and that the only buildings of consequence on the irregular fringe of dry land were the incomplete old Medical College quadrangle and the old Roper Hospital (now demolished), the present Medical Center laid out to view as one crosses the incoming Ashley River bridge, is almost unbelievable.

While "'bigger is not better" (Stewart L. Udall), it is positive that the medical school complex of the present had to become much bigger than its forerunner of even twenty years ago in order to become better. That is not to say, however, that relatively—comparing all circumstances, conditions and relations of the two eras—the Medical College of South Carolina of today is better than in its first period of prosperity, say 1832-1860, when it was a leader. Nor is it to say that by the same



Medical Center, Medical College of South Carolina, from Ashley River Bridge, July 25, 1968.

order of comparison the faculty of today—some fifty, or more, times bigger—is better than that of the early period, members of which were included in Davis' "brightest galaxy" of 1851. The stature of a medical school is measured in terms of the caliber of its faculty. Such comparisons are, of course, as odious as any that might be drawn between physical facilities—the single little gem of a building of 1827 at Queen and Franklin Streets versus the multimillion dollar medical center of the present, each appropriate to its time. Or in the budgets—a few thousand dollars then, against the many millions of today. "If we open a quarrel between the past and the present, we shall find that we have lost the future." (Winston Churchill)

This is an age of experimentalism, in medical education as well as virtually all other processes and activities of life. In experimenting with the medical curriculum, the faculty must be supreme. In administration there must be subservience to the demonstrable needs of the departments in producing a wisely balanced program of education, service and research—in that order of priority. In internal relations, breaking up of administration into endlessly fractionating units brings dispersion of responsibility.

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MORAL CONSIDERATIONS IN PROLONGATION OF LIFE*

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The title of my talk to you today . . . "Moral Considerations in Prolongation of Life" . . . may be somewhat misleading. Treating the subject comprehensively would entail consideration of a physician's complete duty to his patient. What we are here to discuss is the decisions he must make when caring for patients with terminal illness, that is, those who seemingly are at the point of death or who are rapidly approaching that point. These are almost literally life and death decisions. Each generation seems to have the problems compounded by the ever enlarging body of knowledge and skills at our disposal to prolong life a little longer. What we consider artificial and extraordinary measures today may be commonly accepted practice tomorrow.

Terminal illness probably means different things to different people. I find the term difficult to deal with because it implies that a judgment has been made that a patient is suffering from a physical disorder from which he cannot possibly recover. Experience usually, but not always, proves us right in these private verdicts. But the rare exception in which a doomed patient makes an unexpected recovery should make us cautious in rendering such verdicts even to ourselves. In the first place the whole medical team—house staff, nurses, and all who participate in the patient's care—are very likely to take their cues from the attitude assumed, often quite unconsciously, by the patient's physician. In the second place, the patient himself may sense that the physician has given up. Deprived of the thin thread of hope that a confident, interested medical team may give when it is actively administering treatment which gives some promise of improvement, the patient himself may lose the will to live. Hence when dealing with morbid conditions which common sense tells us almost certainly will end fatally, we must make the effort to maintain in ourselves the attitude of optimism which we hope to transmit to the patient and his family. To do this, and, at the same time, behave rationally and realistically in each given situation, requires resources that go beyond mere professional competence. To illustrate, let us consider some of the situations that the modern physician must face.

The Cardio-Pulmonary Resuscitation Team

Nearly every modern hospital now has a resuscitation team—analagous to the pulmotor squad of the fire or police department—to be on call day or night for situations in which a patient is found suddenly to have stopped breathing and the heart beat is either extremely weak or not detectable at all. When a patient is brought to the hospital in an ambulance in this condition, or an attendant on one of the hospital floors finds a patient apparently dying, a signal goes out for the life-saving team to go into action. In our hospital, the loud speaker blares forth . . . "CALL FOR DR. A. SYSTOLE" (the medical term for cessation of the heart beat). Physicians from the Anesthesia Department, the Heart Station, and all house staff and attending physicians available are instructed to go to the place directed by the signal. One person starts mouth to mouth breathing, another begins external cardiac massage. An oxygenator is

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trundled in to administer artifical respiration after a tube has been inserted into the trachea. An electrocardiograph is attached to determine whether the impulses to make the heart beat are present and what kind of irregularity of rhythm has supervened. Sometimes the defibrillator must be used, to be followed by the electric pacemaker to keep the heart beating rhythmically until it assumes its automatic rhythm again.

In the midst of this flurry of feverish activities, on the part of possibly six to eight persons, some one must take charge and make some decisions. It usually falls to the lot of the patient's physician—perhaps in consultation with the representatives of Anesthesia and the Heart Station.

The first decision—unless it has been taken out of his hands by an intern or resident who got to the patient first—must be whether to initiate all these steps to restore life. In the case of an aged person with advanced cerebral arteriosclerosis, heart disease, or cancer from which there is no reasonable hope of recovery, the decision usually is not to undertake these last-ditch measures. I shall not belabor this issue, but merely state that nearly all physicians and nearly all moralists agree with this decision.

The second, and more difficult decision, is once respiration has been taken over by the positive pressure machine and the electrocardiogram reveals some heart activity, which may be prolonged for hours after the heart has ceased to function on its own, when shall the efforts at resuscitation be stopped? If the apparent demise has been sudden . . . such as might occur in drowning, electric shock, anesthesia accidents, allergic shock, asphyxia (as for example, a child shut in a refrigerator, and the like) . . . there can be little question that all possible efforts to restore respiration and heart function must be made, particularly if the individual is young and vigorous. Fortunately, many lives have been saved by these procedures, even though the initial response was slow in appearing. On the other hand, abundant evidence has shown that if respiration and heart action have stopped for longer than four to six minutes before they are restarted there is much more than an even chance that irreparable damage will have been done to the higher centers in the brain. Thus, a person may be revived to lead a vegetable existence for weeks or even months in which the thinking process is gone permanently. This time limit of four minutes between cessation and restoration of the heart beat is very important. More often than not, no one has thought to record the exact moment at which resuscitation efforts are started and when the first heart beat is detected, so the physician may be forced to make a decision without this knowledge.

There is no formal agreement on all the evidence which must be present in such a situation to determine the exact moment of death. A fairly accurate estimation becomes of critical importance in deciding when to turn off the switch of the artificial respirator and stop cardiac massage. In larger medical centers where an organ transplant team is waiting for an opportunity to transfer a cadaver organ to a patient whose life depends on the transplant, the decision is even more critical. This is particularly vital if a non-paired organ such as the heart or liver is to be removed.

A distinguished group of surgeons, jurists and clergymen met in a conference in London in 1966 to debate seriously the ethical considerations of these new surgical procedures. Dr. G. P. J. Alexandre of Belgium proposed the following criteria for death when considering as potential donors of healthy kidneys, persons who had suffered severe injuries to the cranium and brain . . .1) Complete dilation of the pupils with no reflex response to light; 2) Complete absence of muscle and tendon reflexes to the usual stimuli, including profound pain; 3) Complete absence of spontaneous respiration after the mechanical

respirator had been stopped for five minutes; 4) Constantly falling blood pressure even after administering large doses of drugs that usually restore the pressure; 5) An electro-encephalogram tracing which has remained flat for several minutes.[1] Another physician suggested that visualization of the blood flow to the brain by injecting a dye, recognizable by x-ray, into the carotid artery should be tried as a sixth criterion. It is noteworthy that these physicians did not require complete cessation of the heart beat as determined by electrocardiography as evidence for death; their judgment being influenced, of course, by the fact that the prospects of a successful graft of the subject's kidney to the prospective recipient depended on having the blood supply to it intact as long as possible. Others were sympathetic with this point and agreed that none of Dr. Alexandre's cadaver donors had any real chance of surviving. Yet some of the physicians felt that complete cessation of the heart beat should be required to make removal of the kidney a defensible procedure since the donor had had no opportunity to give his consent.

Thus no set of objective criteria has yet been proposed which allows the physicians in charge to escape some value judgments that he and he alone must make. He may be deeply aware of the feelings of his younger colleagues who often believe that a physician's duty is to keep his patient alive as long as he can, regardless of any other consideration. Also he is cognizaznt of the anguish of the patient's family, which s hoping desperately that some miracle will happen if the respirator keeps up its job a little longer.

Lawyers point out that acting to terminate life is usually considered first degree murder regardless of the motives of the one who performs the act. As a matter of practice, however, there seems to be no case in the Anglo-American tradition in which a doctor was convicted of first degree murder when it was shown that his purpose clearly was to relieve his patient of suffering.[2] At the same time they point out that such action is not to be condoned. Failure to act to preserve life when the physician is convinced that such omission is in the patient's best interests is regarded in a different way. George P. Fletcher, of the faculty of the Law School, University of Washington, points out that using the label "omission" does not mean that the physician is free to do what he chooses. However, the special relationship of patient and physician does permit some flexibility. The physician not only knows—or should know—the clinical prospects for survival in his patient, but usually knows something of the patient's religious background; and often he is aware of the views expressed by the patient himself regarding what he wants done if death seems imminent. As a matter of practice the doctor is expected to exercise humane consideration for the total situation, including the views of the next of kin, then do what his conscience dictates. Almost without exception, the clergymen who have examined the question seriously have come to the same view.[3]

Thus, though the decision to turn off the respirator is one from which we long to be spared, some one must make it. All we can do is accept the responsibility and pray for enough wisdom to do the right thing.

Organ Transplants

The possibility of organ transplants has captured the imagination of surgeons for many years. Yet we are only at the beginning of this type of traffic in human flesh. The technical skills required have been quickly mastered. Overcoming the host's inborn defenses which make his tissues reject the tissues of another individual presents a much more difficult problem. Up to now, no method of suppression of these immune mechanisms has been devised which will guarantee permanent viability of transplanted organs, except when the donor is an identical twin.

However, more experience with immuno-suppressive agents has already improved the outlook for survival of the recipients. The University of Colorado Medical School Group[1-a] reports that when blood relatives (excluding identical twins) were used as donors their two-year survival rate was 65 per cent. When unrelated persons were the donors, the two-year survival was 22 per cent, the mean being 53 per cent. Many persons receiving the kidney transplants have now lived more than four years.

Increasing precision in the prediction of duration of life for patients apparently doomed to die without the benefit of new, healthy kidneys, and improving technics to prevent rejection of the transplants have partially resolved some of the ethical problems. The procedure, if performed by an experienced team, can no longer be regarded as purely experimental. Demonstration of the feasibility of using cadaver kidneys, if they are obtained promptly, has greatly enlarged the pool of potential donors.

Even so, compelling ethical problems persist. Is it, for instance, defensible to allow an identical twin who is a minor, and thus unable to give legal consent, to be a donor? Most physicians and most jurists are firm in disallowing such a procedure, even if the parents urge that it be done. In many cases prisoners have been used as donors. Without going into a long discussion of this practice, I shall merely say that this now is frowned upon, since some element of coercion or implied possible gain in the way of lightening of prison sentence is almost unavoidable.

Should we or should we not allow a healthy young father, with a growing family to raise, to donate a kidney to an identical twin brother in far advanced uremia from glomerulonephritis? Or what shall we tell the young mother with several small children to care for when she wants to donate a kidney to one of her brood who is approaching death from bilateral polycystic kidney disease?

The imponderables are even more difficult in the case of transplants of single organs such as the heart or liver. In the first place, should the new organ replacement not survive, the patient is doomed. If he is in such critical condition that he is unlikely to survive without the new part he is anything but a good surgical risk. In the same way the donor, if not dead before his heart is removed, will surely be dead afterward. But the chances of the survival of the transplanted organ are *much* greater if the transfer of the donated organ is made while it is still being actively perfused with oxygenated blood. Thus ideally the transaction should be made between a donor physiologically and irretrievably dead as far as his brain is concerned but still alive in his lungs and heart, and a recipient whose heart is so badly diseased that he will with certainty die within days or weeks without the new organ. Decisions in these cases are so critical that we are not prepared for them.

I heard Dr. Barnard's account of his successful heart transplant and saw his pictures of the hearts of this patient and the one who did not survive. One must agree that the team of physicians which evaluated the recipients correctly predicted that the diseased hearts which were replaced had far advanced pathologic changes. The patients were so severely handicapped that they would soon have died of heart failure. Yet, neither the physicians who examined the heart transplant recipients nor any other physicians could predict with absolute certainty what the life expectancy would have been *without* the surgery which in one case was successful and which failed in the other.

One cannot quarrel with success, nor should he. Seemingly insurmountable technical problems have been overcome to make such a surgical milestone possible. At this time, however, it is difficult to conceive of heart transplants being done

on a scale anything like what is being done with kidney transplants. Dr. Barnard stated that each heart transfer which his team had undertaken cost approximately $50,000. Also, the procedure obviously cannot be done at will, for a very special set of circumstances must be present to make the undertaking feasible. In the one successful case, suppression of the rejection response which it was feared would quickly terminate the experiment has been unexpectedly smooth. Possibly, heart muscle from another individual will prove more acceptable to the host's immune mechanism than other kinds of human tissue. It is too soon after this epoch-making event for any of us to be making moral judgments about the wrongness or rightness of the procedure. We should all pay tribute to the monumental accomplishment whose final ramifications we cannot see. All of us can take great satisfaction in the unquestioned integrity of the team of physicians who accomplished this important first step.

Human Experimentation and the Use of Toxic Drugs

A resolution adopted by the World Medical Association states explicitly that under no circumstances is a doctor permitted to do anything which would weaken the physical or mental resistance of a human being except from strictly therapeutic or prophylactic indications imposed in the interest of the patient. There is no right to risk an injury to one person for the benefit of others.[4]

Since the outlook for prolonged existence in patients judged to be "terminal" is hopeless there has always been the temptation to subject them to measures which conceivably might be of some benefit, but whose use is clearly too filled with risk to be used on healthy persons. We have just discussed the type of experiment in which, to a group of conscientious doctors the possible benefit appeared to out-weigh the risk. In other instances the justification for a risky procedure is less certain.

Beecher[5] cites the report of an experiment in which a piece of melanoma, a highly malignant tumor, from a young woman was transplanted into her informed and volunteering mother. The object was to learn something of immunity to cancer, and it was hoped that production of antibodies against the cancerous tissue might be helpful in treatment of the patient. As the experiment turned out, the daughter died the day after the transplant was effected. On the twenty-fourth day after the implant was made, it was widely excised from the mother, but she died several months later from melonoma metastases.

Such ill-advised procedures, fortunately, have been done rarely. However, in the gray zone in which various last-ditch measures are undertaken in the faint hope that they might prolong life a few more weeks or months but may be disastrous if they do not turn out right, physicians struggle constantly between humanitarian impulses and scientific judgment.

In far advanced cancer or leukemia, various chemical agents are administered intravenously in the hope that they will interfere more effectively with the growth of the rapidly metabolizing tumor cells then with the more stable normal tissues of the body. Even when used with meticulous care severe anemia, diminuition in white blood corpuscles, liver and kidney damage, and less serious effects on the skin are produced. Every time these agents are used one must ask himself whether the possible prolongation of life until something truly effective might be discovered is worth the deleterious side effects, which are quite predictable. The final judgment usually is made not on the basis of demonstrable therapeutic merit but subjective considerations. In the state of acceptance of the cancer at the time reached by the patient and his family,

would not the relatives and even the physician himself feel very guilty if something very concrete beyond the surgical extirpation, which had been tried or rejected on the grounds of extensive metastases, were not done? Physicians are often trapped into administering worthless and expensive, but probably harmless agents, such as Krebiozen, simply to satisfy someone's guilt complex. It is surprising how often a family member close to a terminal cancer patient will shamefacedly ask the attending physician to undertake some "cancer cure" simply because some friend or distant relative had asked if this particular procedure had been tried. I no longer have any qualms about rejecting such suggestions if I feel they are worthless. Both the patient and his family really want their physician to be in charge and to make the decisions which they are incapable of making—and this is as it should be.

Ablative Surgical Procedures

One of the spectacular advances in cancer therapy has been the demonstration that the spread of metastases in malignancies of the breast may be halted, sometimes for many months, by extirpation of the pituitary or of the adrenal glands. The same effect on bone metastases from cancer of the prostate may be obtained by bilateral removal of the testicles.

While such procedures constitute perfectly acceptable medical practice, the decision as to whether to use them or not is not always easy. I recall one patient whose husband had died shortly before discovery in her of lung and bone metastases secondary to cancer of the breast removed two years before. She was hospitalized because she lived alone and was having so much shortness of breath and pain that she needed constant attention. It was decided to remove her adrenal glands, after which she required daily administration of steroids as replacement therapy. She soon had less pain and eventually there appeared to be some regression of the tumor spread in the lungs. After some weeks, the former pain and breathlessness reappeared and remained with her until she died fourteen months later. During this period she developed two pathologic fractures, and was never able to leave the hospital. All of the savings which she and her husband had hoped to leave to her daughter were used up, and she had few moments of physical or mental comfort during the entire period. One wonders whether or not a disservice had been done to this woman in prolonging her life.

Having seen the transformation of normal appearing persons to grossly overweight "vegetables" with diabetes insipidus as a result of pituitary extirpation, I can no longer, with a clear conscience, recommend this procedure for cancer palliation. Bilateral orchiectomy to mitigate the suffering caused by metastases from cancer of the prostate is a much more efficient procedure, although it does not guarantee permanent cure. Here is a situation in which the patient must, of course, know that the surgery in his scrotum must be done, but in which withholding all the details is defensible in the interests of the patient's peace of mind.

My position on telling patients the truth regarding what we think is terminal illness seems to coincide with that of most of my colleagues. It is that patients should never be told an untruth, but that revelation of full details of a serious malady which may well be fatal should not be forced upon them. Most patients will, in a variety of ways, make it known to their physicians that they do, or do not, want to know, and their wishes must be respected. Sensing how much to tell, and how soon, depends upon good rapport with the patient. The feeling that "we are in this thing together" must be established by deed and attitude rather than words to the patient. If bad news is to be revealed it must be accompained by optimistic uncertainty regarding the outcome.

New discoveries are on the way, and unexpected and miraculous cures seem to occur every day.

Conclusion

I shall spend no time discussing prolonged use of antibiotics, intravenous fluids, the electrical pacemaker imbedded in the tissues to keep the heart of the patient with heart block beating with sufficient frequency, the artificial heart, and other modern devices to make the human organism continue its existence a little longer. The kinds of problems these measures bring up in no way differ from those already considered. Since all individuals are different from all others, there are no easy answers applicable to the profound problems connected with each life's termination. In general it would seem that when there is even a faint hope of prolonging a life in such a way that a reasonably happy and useful existence can be anticipated, every possible means at our disposal should be utilized. In the case of older individuals whose life has become a burden for them and for their families, particularly if the brain has ceased to function, we must ask ourselves whether we are preserving life or merely interfering to prolong death. The best we can do is to pray for the love and understanding required for wisdom in applying our knowledge. I close with a quotation from the Litany prepared by Sir Robert Hutchinson, a wise old physician to the London Hospital . . . "From inability to let well alone; from too much zeal for the new and contempt for what is old; from putting knowledge before wisdom, science before art, and cleverness before common sense, from treating patients as cases, and from making the cure of the disease more grievous than the endurance of the same, Good Lord deliver us".[6]

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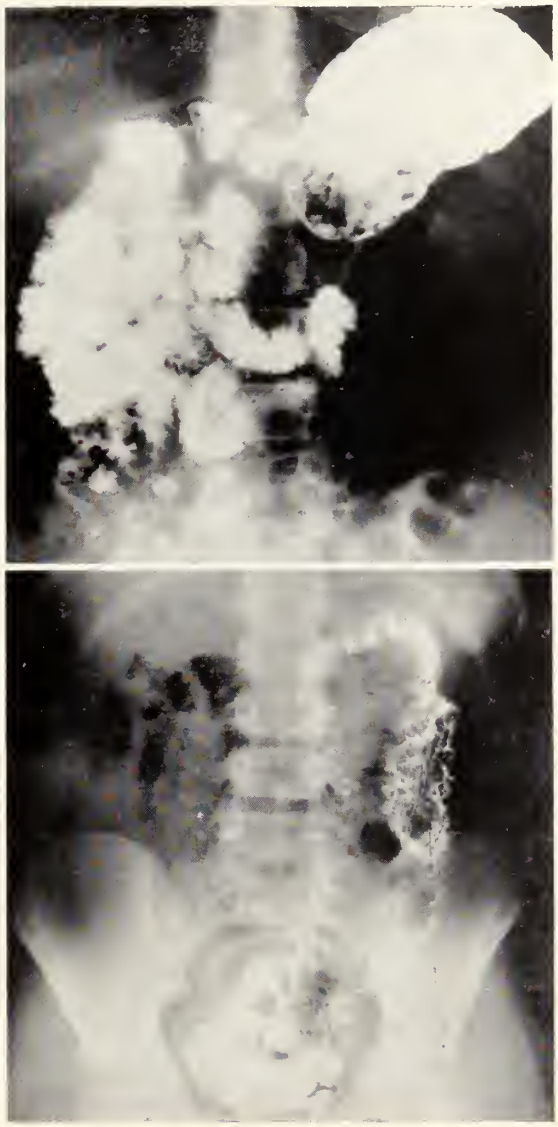
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FOR RENT

Suite of Doctor's offices, on first floor, with on premise parking available November 1st. Suite consists of large waiting room, nine private offices, equipped with central heating and cooling. Utilities and jantor services furnished. Located one block from Columbia Hospital and five blocks from Baptist Hospital, 1420 Gregg Street, Columbia, S. C. 29202. Write or call John H. Young, Jr., P. O. Box 67, Columbia, S. C. 29202. OND

X-RAY FILMS OF THE MONTH

H. BIEMANN OTHERSEN, JR., M.D.
S. E. PUCKETTE, JR., M.D.
Medical College Hospital
Charleston, S. C.



These films of an upper GI series and a barium enema, were made of a seven year old white female who had been hospitalized on two occasions in the month prior to admission. She had cramping abdominal pains which were not typical of appendicitis and the above films were made. Prior to the present difficulty she had been considered to be a healthy child with no complaints referable to the abdomen.

These films depict the findings in malrotation of the intestines. The upper GI series show the duodenum to descend in the right gutter. There is no ligament of Treitz. The small bowel is located entirely in the right side of the peritoneal cavity.

The barium enema shows the colon to be entirely to the left of the midline with the cecum in the left lower quadrant. This malrotation of the intestines specifically involved the embryological midgut.

The midgut is that portion of the intestinal tract beginning at the second portion of the duodenum and including the remainder of the small bowel and the large bowel up to the mid-transverse colon. The multiple abnormalities that may occur with malrotation are much more easily understood when the embryologic development of the midgut is reviewed. The classic description of Frazer and Robbins divides this development into three stages:[1]

Stage one—The midgut resides in the umbilical cord during the first ten weeks of gestation. During this time it makes a 90° counterclockwise rotation. If the developmental process goes no further, the child will be born with an omphalocele.

Stage two—During the tenth to twelfth week of embryonic life the midgut retracts from the umbilical cord into the abdominal cavity and simultaneously undergoes an additional 180° counterclockwise rotation. If this rotation does not occur, a complete malrotation exists, as in the case depicted here, and the small intestine lies in the right half of the abdominal cavity while the colon is in the left. This condition is often asymptomatic. However, obstruction may occur from kinking of the duodenum or from volvulus of the midgut as it twists around the narrow pedicle formed by the superior mesenteric artery. Other abnormalities such as an internal hernia and reverse rotation may be confusing variations.

Stage three—From the twelfth week on the cecum gradually descends into the right lower quadrant. The cecum is then fixed, as are the ascending colon and the duodenum. Arrest of rotation in this stage results in a cecum which lies in the right upper quadrant. Peritoneal bands which arise in an attempt to fix the colon may pass over the duodenum and produce obstruction. Other abnormalities in development may be a retrocecal appendix or a hypermobile cecum. Most of the cases of malrotation will show early in life and usually before one month of age. These children may become distended and vomit bile-stained material and the x-ray films of the abdomen may look innocuous. However, a barium enema showing malrotation should be an indication for operation, since volvulus of the small intestine, when unrelieved, will produce infarction of the entire small bowel. When symptoms develop later in life, as in this child, operation is indicated to prevent volvulus.

Operations for relief of this condition are still variations of the procedure originally described by Ladd.[2] This procedure consists essentially of freeing any kinking in the duodenum and removing the appendix. The small intestine is then brought directly down the right gutter and the cecum is placed in the left lower quadrant. Ladd used dry sponges to stimulate the formation of adhesions to fix the bowel in this position. The resulting placement of the bowel is then exactly the opposite from normal fixation, but allows a broader base for fixation of the small bowel mesentery.

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President's Page



Guest Editorial

MAY DAY MAY DAY
MEDICAL EMERGENCY
POLITICAL ACTIVISTS NEEDED

I am grateful to President Joel Wyman for the opportunity of addressing this message to the medical profession of S. C. May I extend to each of you my deep appreciation for the privilege of serving as your Vice-President.

Today, we as a nation are faced with more crises than ever before in history. The devaluation and decline of our fiscal stability is an ever increasing problem. Citizen and governmental responsibilities for law and order should be considered as top priority. The very safety of each and everyone in his home, his business, or on our streets and highways is threatened. Local control of our daily affairs is fast disappearing as more and more bureaucracies take over in Washington.

Where do we stand as a professional group, one of the most highly educated and trained segments of American Society?

Are we living up to our responsibilities of citizenship? Are we standing up and being counted in the mainstream of the political, economic, civic and governmental responsibilities of our local communities, cities, state, and nation?

Organized medicine has been slow in responding to the realities of the space age. It is slowly and energetically attempting to regain its rightful status in America.

AMPAC was created and sponsored by the AMA to provide a political arm for the medical profession to rally to, to support and protect the private practice of medicine, and to preserve the traditional doctor-patient relationship which has produced the best medical care in the history of civilization.

Scalpel, South Carolina Alliance for Liberty, Political Education, and Life, is the political arm of the SCMA, Non-partisan support—Republican or Democrat—to congressional candidates who are friends of medicine and are laboring to protect the truly American way of life in the Halls of Congress. As GOES CONGRESS—SO GOES THE NATION.

Are the practitioners of medicine in S. C. supporting it? The answer is a loud and emphatic *NO*. You who have so much to lose are not willing to contribute $20.00 to help stay the rapid federalization of the practive of medicine and to maintain the private practice of medicine. The records show that about one out of every nine doctors in S. C. is a member of Scalpel.

This year's national election can reverse the socialist bent of the Congress by defeat of some of the liberal and socialistic congressmen elected two and four years ago. Your support is URGENTLY NEEDED—TO BOTH DEMOCRAT AND REPUBLICAN CANDIDATES—TAKE YOUR CHOICE—SCALPEL SUPPORTS BOTH—MAY I ISSUE A CLARION CALL to each and every member of the greatest profession, dedicated to serving our fellow man, to relieve suffering, to extend life, to study, and to research, so that further advances may be made.

JOIN SCALPEL TODAY
GET YOUR WIFE TO JOIN
BECOME ACTIVE IN THE POLITICAL LIFE OF YOUR COMMUNITY, STATE AND NATION
YOUR INFLUENCE COUNTS — TREMENDUOSLY!!

C. TUCKER WESTON, M.D.

Editorials

AMA Clinical Convention

At no time in medical history has there been such an explosion of scientific knowledge and technology. And never has there been a greater demand for physicians' services.

These factors combine to burden the busy physician in his efforts to keep abreast of the modern developments in medicine.

There is an abundance of fine scientific publications, but many hours of reading would be required to learn what can be gained by attending the Clinical Convention of the American Medical Association. It will be in Miami Beach, Fla. Dec. 1-4.

There will be 125 exhibits there reflecting the latest developments in pharmaceuticals, medical equipment and scientific endeavors.

The Clinical Convention—this will be the 22nd—is one of the best ways of providing continuing education to the busy physician. The scientific exhibits alone are a good postgraduate course in medicine.

And special postgraduate courses will be offered, too, in diabetes, fluid and electrolyte balance and thyroid disease. In addition, there will be about 30 medical motion pictures and scientific television programs will be shown live and in color.

For the physician who likes to discuss the intricacies of his profession, there will be clinical workshops and four breakfast roundtables.

The AMA Clinical Convention is designed primarily for the man in practice. The speakers will read papers that will bring to the practitioner the latest findings of others in his area.

There is an unprecedented emphasis on and need for continuing education. A great manpower shortage has made it mandatory for the physician to expand his knowledge and become more versatile.

The Clinical Convention promises to be a stimulating four days, worthy of the busy physician's time. Every physician is urged to take advantage of this educational opportunity.

The Flu and You

Following quickly on the announcement of the Public Health Service that the likelihood of epidemics of influenza of the usual recent types is small comes word that a new strain of the virus (the fifth of its family), designated as Influenza Virus A_3, has become prevalent in Hong Kong and elsewhere in the East. This is a type which has not been known previously, and apparently has not been known to attack any population before, nor had a specific vaccine been developed until this immediate threat appeared. It is suspected that this may become a widespread problem. Manufacture of vaccine is in process, but it is not likely that the quantity and distribution will be sufficient in time to offer extensive protection against a new enemy.

Thus the optimistic forecast seems headed for the drain. Let us hope that the current prediction will not be fulfilled.

QUIDNUNC

The world of medicine should always welcome, even it it does not always appreciate, a good editor who protects it with his blue pencil against the logorrhea of too articulate man.

Diseases of the Chest 54:1



Dr. Gordon T. Wannamaker, Dr. Bartolo M. Barone and **Dr. Gerald J. Quinn** have announced their association in the practice of neurology and neurosurgery at 315 Calhoun Street, Charleston. **Dr. Willard B. Mills** has been elected chairman of the South Carolina Chapter, American Academy of Pediatrics. Other new officers include **Dr. Casper E. Wiggins**, alternate chairman; **Dr. Jack W. Rhodes**, secretary-treasurer; **Drs. David C. McLean, J. Earle Furman** and **William F. Young**, executive committeemen; **Dr. Henry W. Moore**, nominating committeeman. **Dr. Redden L. Parramore Jr.** announces the removal of his office to the Charleston Medical Center, 315 Calhoun Street, Charleston, for the practice of diseases of the ENT. **Dr. Heyward Hudson**, a Ruffin native, has begun the practice of obstetrics and gynecology in Greenville. He was graduated from the Medical College of South Carolina. For the past two years, he has been practicing at the U. S. Army Hospital at Fort Stewart, Ga. **Dr. Charles A. Mood** of Sumter has joined the staff, as a pediatrician, of a new comprehensive care program for Charleston's medically indigent. Dr. Mood is a graduate of Wofford College and the Medical College of S. C. For three years he served as flight surgeon with the U. S. Air Force and later studied in pediatrics.

Dr. James Armistead of Greenville has joined the consultant staff of Williamston Hospital. Dr. Armistead, a specialist in internal medicine, brings to nine the number of consultant and courtesy staff physicians serving the hospital in addition to **Dr. Dwight Smith**, the only full time physician. **Dr. James Dennis** has opened his office in Piedmont at 36 Main Street. **Dr. Donald C. Roberts** has joined the staff of the Orr-Huff-Browne-Kent Surgical Clinic on North Fant St., Anderson. He is a graduate of Bowman Gray School of Medicine and specializes in general and thoracic surgery. **Dr. Watson C. Finger** and **Dr. G. Fraser Wilson** of Charleston have announced the association of **Dr. A. Bert Pruitt Jr.** in the practice of gynecology and obstetrics at 84 Halsey Blvd. and 3370 Rivers Avenue. **Dr. Joseph E. Brodie** has retired after 33 years of service to the State Board of Health. He has been director of the Lexington County Health Dept. since 1952. A graduate of the Medical College of S. C., Dr. Brodie started his public health career in Alabama and returned to South Carolina in 1927.

Dr. Arthur F. DiSalvo, a native of New York City, has been appointed chief of the State Board of Health's Bureau of Laboratory Services and Research. For the past two years, he has served a post-doctoral residency at the National Communicable Disease Center in Atlanta. He is a graduate of the Medical College of Georgia. **Dr. James M. Wilson** and **Dr. J. Richard Sosnowski** have announced the association of **Dr. Thomas P. R. Rivers** in the practice of gynecology and obstetrics at 152 Rutledge Avenue, Charleston. Finger Clinic-Hospital has announced the association of **Dr. Harold R. Hoke** in obstetrics and gynecology in Marion, S. C.

Dr. Lawrence Sidney Connor, a former Navy medical officer, has been named medical director for Springs Mills, Inc. of the Grace-Fort Lawn area. A native of Bowman, Dr. Connor was graduated from the Medical College of S. C. **Dr. Charles H. Banov** of Charleston has been in London representing South Carolina at the International Mental Health Conference and Assembly. **Dr. Louis J .Dodd** is the new head of the department of Pathology

at Mary Black Memorial Hospital in Spartanburg. A native of Brazil, Dr. Dodd has been associated with the Memorial Hospital in the Wilmington Delaware Medical Center for the past four years. **Dr. Robert C. Brownlee Jr.** of Greenville has been named secretary to the AMA Section on Pediatrics. A native of Laurens County, **Dr. Isadore Schayer** is leaving his position at the University of South Carolina and moving to Monterey, Calif. In his 90th year, Dr. Schayer has been honored recently by the university.

THE MONTH IN WASHINGTON

Both the Democratic and Republican 1968 national campaign platforms cited the importance of the role of private enterprise in the development of government health programs. The GOP placed greater emphasis on private medicine than the Democratic party did.

"While believing no American should be denied adequate medical treatment, we will be diligent in protecting the traditional patient-doctor relationship and the integrity of the medical practitioner," the Republican plank said.

The Republican platform also pledged "to encourage the broadening of private health insurance plans," including extension to cover mental illness.

"Through a partnership of government and private enterprise, we must develop new coordinated approaches to stem the rise in medical costs without lowering the quality or availability of medicare care," the Democratic platform said.

Without being specific, the Democrats indicated support for universal government health insurance or, at the least, wide expansion of medicare or medicaid (or both). Boasting of "giant steps" in the past eight years "in assuring life and health for its citizens," their platform said: "We Democrats are determined to take those final steps that are necessary to make certain that every American, regardless of economic status, shall live out his years without fear of the high costs of sickness."

The Democratic health plank also said medical costs could be lowered by more out-of-hospital care, comprehensive group practice arrangements, increased availability of neighborhood health centers, and the greater use of sub-professional aides.

The Republican platform said "inflation produced by the Johnson-Humphrey Administration" was a major factor in the increases in health care costs.

The AMA statement expressed hope that the next federal Administration, whether it be Democratic or Republican, "will provide men and women in medicine, and those engaged in the allied sciences, the opportunity to think and work in a free atmosphere to pursue their common goal of a better and more healthful life for everyone."

The AMA emphasized the desirability of health programs being partnerships among private enterprise and federal, state and local governments. The AMA pledged its support to such cooperative programs for mental illness, infant mortality, occupational health and safety, and education of physicians and allied health personnel.

Modernization Program for State Sanatorium

A broad modernization program for the South Carolina Tuberculosis Sanatorium—State Park—has begun. Having assumed administration of the facility July 1, the S. C. State Board of Health has moved its Tuberculosis, Heart and Cancer Division there.

Patient care will now be administered by this Division which is headed by Dr. Frank L. Geiger with Dr. David B. Gregg as chief of Tuberculosis Control. Dr. James W. Fouche has agreed to continue in the capacity of part-time medical director.

DR. WILLIAM BYERLY HONORED

More than a half century of service to his fellow man was recognized this summer with Dr. William L. Byerly Appreciation Week, designated for August 24-31 by Mayor Robert K. Bass of Hartsville.

The week honoring the 80 year old physician ended with a public reception attended by some 3,000 persons on the grounds of The Byerly Hospital. The reception was sponsored by the City of Hartsville, civic, religious, fraternal and service organizations, under the leadership of a Planning and Steering Committee.

Dr. Byerly came to Hartsville in 1915 and opened an office for the general practice of medicine. He continues in active practice today, spending 112 hours a week or more in medical practice.

Dr. Byerly established a small clinic which grew into one of the largest in the state. He expanded his professional service to include surgery, with specialization in gynecology. Obstetrics formed a large part of his practice.

His most spectacular achievement has been delivery of an estimated 12,000 to 14,000 babies—the equivalent of one baby a day for 30 years.

After graduating at Western Maryland College in 1907, Dr. Byerly received his medical education and training at the University of Maryland Medical School, where he was graduated in 1911. He served his internship at the University Hospital.



William Byerly, M.D.

Out of this beginning grew The Byerly Hospital, which he established and directed until 1956, when he deeded it to a Board of Trustees for a nominal sum. It has since been operated as a non-profit, locally controlled community hospital. With the growth of the community, a new $3 million hospital of some 150 beds was erected in 1968. The present staff includes 14 physicians, 110 nursing personnel and a total staff of more than 200.

MEETING

The Tenth National Conference on the Medical Aspects of Sports, sponsored by the American Medical Association under the auspices of its Committee on the Medical Aspects of Sports, will be held in Miami Beach, Florida, at the Hotel Deauville on December 1, 1968.

As was true of the previous nine Conferences, the Tenth will cover a wide range of subjects of interest to those serving school and college athletic programs. Included will be forums on the management of knee injuries, back problems, and problems related to vision in sports. Other sessions will be devoted to a series of clinical concerns in sports warranting increased attention (eg, cauliflower ear, pulled muscles, facial injuries, and communicable disease). One discussion session will be devoted to the controversial issues affecting participation of young athletes, another to health and safety considerations in the conduct of aquatic activities.

The featured luncheon speaker will be Payton Jordan, Head Coach of the 1968 U. S. Olympic Track and Field Team, who will discuss "The Olympics in Retrospect."

The Conference is open to key non-medical athletic personnel as well as interested physicians. Those who would like to receive further information concerning the Conference should address the Committee on the Medical Aspects of Sports, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

20th ANNUAL SCIENTIFIC ASSEMBLY
SOUTH CAROLINA CHAPTER OF THE
AMERICAN ACADEMY OF GENERAL PRACTICE

November 13-15, 1968

Francis Marion Hotel, Charleston, S. C.

WEDNESDAY, NOVEMBER 13, 1968

9:00 A.M. Registration

9:30 A.M. Board of Directors Meeting

12:00 Noon Luncheon (Board of Directors, Officers, Chairman, Committees Commissions)

1:00 P.M. Welcome—Asbury C. Bozard, M.D., President

1:15 P.M. Excessive Insulin in the Diabetic Patient: A Frequent Problem With Grave Consequences
Joseph C. Shipp, M.D., Assoc. Professor, The J. Hillis Miller Health Center, Univ. of Florida (sponsored by Pfizer Laboratories)

2:00 P.M. Cardiac Pacemakers—William S. Houck, M.D., Surgeon, Florence, S. C.

3:00 P.M. Urological Problems of the General Practitioner—Part I David W. Goddard, M.D., F.A.C.S., Daytona Beach, Florida (sponsored by Eaton Labs.)

4:00 P.M. 4:00 P.M. Strokes, the first step: Differential Diagnosis
Hiram Curry, M.D., Associate Professor of Neurology, Medical College of S. C. (sponsored by S. C. Regional Medical Program)
Exhibits Open

5:15 P.M. Adjourn

8:00 P.M. President's Reception
(courtesy of Marion and Table Rock Laboratories)

THURSDAY, NOVEMBER 14, 1968

9:00 A.M. Stroke, the second step: Choice of Therapy.
A Speaker will be announced by Dr. Charles P. Summerall, Coordinator for Heart Disease and Stroke, SCRMP (sponsored by the South Carolina Regional Medical Program)

9:40 A.M. Surgery and Diabetes: Recognition of the Diabetic and Treatment Before, During and After Surgery. Joseph C. Shipp, M.D., Associate Professor, The J. Hillis Miller Health Center, Gainesville, Florida (sponsored by Pfizer Laboratories)

10:20 A.M. Business Meeting

11:00 A.M. Urological Problems of the General Practitioner—Part II
David W. Goddard, M.D., M.A.C.S., Daytona Beach, Florida (sponsored by Eaton Labs.)

11:40 A.M. Chemotherapy, Specifically Related to Gynecological Malignancies—Paul B. Underwood, Jr., M.D., Assistant Professor of Obstetrics and Gynecology, Medical College of South Carolina

12:15 P.M. Jaundice In Newborn—Milton Westphal, M.D., Chairman, Department of Pediatrics, Medical College of South Carolina

1:00 P.M. Luncheon
Detail men are cordially invited to be our guests for this luncheon.

FREE AFTERNOON—Tours, etc, planned by the Local Arrangements Committee Information may be obtained at the registration desk.

7:00 P.M. Social Hour, (sponsored by B. F. Ascher Company)

8:00 P.M. Banquet
Speaker, Maynard I. Shapiro, M.D., President Elect, The American Academy of General Practice

FRIDAY, NOVEMBER 15, 1968

Immunization Symposium, sponsored by the National Communicable Disease Center, under the direction of Dr. R. Burt Prater, Acting Chief.

9:00 A.M. Present Status of Immunization Procedures (immunization agents, effectiveness, shortcomings and weakness, etc.)

9:40 A.M. Use and Abuse of Gamma Globulin (rubella, mumps, hepatitis—monthly injections)

10:40 A.M. Rubella and Mumps Vaccine (Use, recommendations, possible spread to pregnant females, etc.)

11:20 A.M. Access to Biological Studies of the South Carolina State Board of Health Laboratory Facilities—Arthur F. DiSalvo, M.D., Director, Division of Laboratories, S. C. State Board of Health.

12:00 Noon Luncheon
Speaker, William M. McCord, M.D., President, Medical College of South Carolina

1:30 P.M. Measles and Smallpox (complications and Contraindications)

2:10 P.M. Respiratory Vaccines—Current Considerations

3:00 P.M. Horizons in Vaccine Development and Antiviral Agents (adenovirus, cold, interferon)

3:40 P.M. Panel Discussion

5:00 P.M. Drawing of Door Prizes
Adjournment.

REPORT OF MEDICAL EXAMINERS

The State Board of Medical Examiners of South Carolina met at the Wade Hampton Hotel in Columbia, South Carolina on June 10, 11, 12, 1968. Written examinations were held and sixty-three physicians passed the examination. Sixty-two were recent graduates of the Medical College of South Carolina.

The successful candidates are as follows: Drs. Virginia M. Anderson of Brooklyn, N. Y.; Perry W. Aycock, Jr. of McConnells; Samuel A. Black of Paris, Tenn.; William Y. Buchanan, Jr. of Winnsboro; William J. Burk, III of Charleston; Michael D. Caldwell of Spartanburg; Victor C. Campbell of Dunedin, Fla.; Gerald M. Chambers of Rock Hill; Malcolm O. Corley of Columbia; Joel R. Cox, Jr. of Seneca; Uriel X Cullum, Jr. of Columbia; Garfield W. Danehower, III; Roger A. Davis of Hemingway; Louis J. Dodd of Spartanburg; Thomas B. Eison of Columbia; James E. Farr, Jr. of Greenville.

Also, Drs. Harry W. Floyd of Olanta; William J. Fogle, III of Orangeburg; Carl M. Foster of Columbia; John M. Foxworth of Wilmington, N. C.; James D. Gould of Corning, N. Y.; Robert B. Grove of Rock Hill; Phil L. Hadaway, Jr. of LaGrange, Ga.; Byron B. Harder, Jr. of Sumter; John A. Harrill, Jr. of Anderson; Jerry E. Jackson of Columbia; Chester W. Jenkins of Augusta, Ga.; James W. Kellett of Fountain Inn; James H. Kelly of Savannah, Ga.; John R. Langley of Meridan, Conn.; Wesley W. Lawton, Jr. of Augusta, Ga.; Rodman Lemon, Jr. of Ft. Benning, Ga.

Also, Drs. J. Lindsay Leviner, Jr. of Columbia; William B. Lowry of Chester; Wilson L. Lynch of Ft. Benning, Ga.; Robert Malanuk of Brooklyn, N. Y.; Thomas E. Mason of Anderson; Sally B. McCants of Columbia; William D. Meredith of Selma, Ala.; Willie B. Moseley of Aiken; Samuel L. Orr of Seneca; Vincent Petno of Uniontown, Pa.; Wendell E. Phillips, Jr. of Atlanta, Ga.; James P. Pressly, II of Anderson; Daniel Ravenel of Spartanburg; James E. Reinhardt, Jr. of Rock Hill; James C. Reynolds of Columbia; Clarence M. Rogers, Jr. of Ft. Bragg, N. C.

Also, Drs. John R. Rowe of Charleston; Jerry J. Sample of Ft. Bragg, N. C.; Joel S. Sexton of Spartanburg; James G. Simpson of Chester County; James D. Smith of Anderson; John B. Steigner of Philadelphia, Pa.; Hilliard A. Strickland of Charleston; N. Joseph Thompson, Jr. of Charlotte, N. C.; Thomas M. Verdin, III of Greenville; Frank R. Warder of Indianapolis, Ind.; Douglas W. Whetsell of Bowman; Carl A. White, Jr. of Florence; Larry Butler White of Conway; James D. Whitehead, Jr. of Lake City; Luther C. Williams, III of Lancaster; William J. Yarbrough, Jr. of Rome, Ga.

Physicians applying for a medical license by endorsement of their credentials were interviewed and licensed to practice Medicine and Surgery in the State of South Carolina. They are as follows:

Dr. Charles W. Bauknight is a graduate of Emory University and was originally licensed in Georgia. He is practicing obstetrics and gynecology in Anderson.

Dr. Marian M. K. Bosien was graduated from the University of Pennsylvania and has a license in New Hampshire and North Carolina. She is an anesthesiologist in Tryon, North Carolina.

Dr. William R. Bosien is also a graduate of the University of Pennsylvania and has licenses in New Hampshire and North Carolina. He practices general surgery in Tryon, North Carolina.

Dr. Thomas W. Brooks, III was graduated from the Medical College of Georgia and was licensed in that state. He is currently serving a residency in radiology at the Medical College of Georgia.

Dr. Echol E. Davis is a graduate of Tulane University and is licensed in Louisiana and Georgia. He has recently entered a residency in psychiatry at the Medical College Hospital.

Dr. Marie M. Frain was graduated from the Medical College of Georgia and was originally licensed in Georgia. Currently in Indiana, she plans to locate in North Augusta where she will have a limited practice in psychiatry.

Dr. Donald K. Freeman, Jr. was graduated from the University of Rochester and has a certificate from the National Board of Medical Examiners. Dr. Freeman has completed residency training in psychiatry and will join the medical staff at Clemson University.

Dr. Tom E. Hall is a graduate of the University of Louisville and holds a license in Kentucky. He is a radiologist and will locate in Seneca.

Dr. William T. Hammill received his degree from Ohio State University and was licensed in Ohio. He has recently begun the practice of internal medicine in Spartanburg.

Dr. Lawrence D. Hanback, Jr., a graduate of the Medical College of Virginia, is licensed in Virginia. He is on the staff of the V. A. Hospital in Charleston as a general surgeon.

Dr. Donovan D. Hanson was graduated from the University of Iowa and has a license in Iowa. He is currently with the U. S. Navy in Charleston.

Dr. Nelson R. Jensen is a graduate of the University of Nebraska and is licensed in that state. Dr. Jensen is currently an internist on the staff of the V. A. Hospital in Columbia.

Dr. Roger A. Krebs is a graduate of the University of California at Los Angeles and is licensed in California. Dr. Krebs is currently with the U. S. Army at Fort Jackson.

Dr. Arthur D. McCutchan holds a degree from Duke University and is licensed in North Carolina. He has recently completed a residency in ophthalmology and plans to locate in Florence.

Dr. Henry G. Moeller, Jr., a University of Minnesota graduate, has a certificate from the National Board of Medical Examiners. He is completing a residency in psychiatry in California.

Dr. Ronald D. Noblin is a graduate of the University of California (Los Angeles) and is licensed in California. He is currently with the U. S. Public Health Service in Charleston.

Dr. Loren F. Parmley, Jr. was graduated from the University of Virgiina and was originally licensed in Virginia. He practices internal medicine and cardiology. Formerly with the U. S. Army he has recently joined the staff of Spartanburg General Hospital.

Dr. Lucius C. Sheehan, Jr., a Medical College of Georgia graduate, was originally licensed in that state. Dr. Sheehan practices orthopedic surgery in Columbia.

Dr. Bernice G. Shoobe was graduated from the University of Alabama and has a certificate from the National Board of Medical Examiners. She is a pediatrician and is currently in Columbia.

Dr. Jack R. Whittaker holds a degree from Loma Linda University and a certificate from the National Board of Medical Examiners. Dr. Whittaker is in general practice in Spartanburg.

Dr. Joan S. Williams, a graduate of the University of Iowa, is licensed in that state. She is currently in general practice at the Columbia Hospital.

Dr. John W. Williams, Jr., a Medical College of Georgia graduate, is licensed in Georgia. Dr. Williams is in general practice in Lavonia, Georgia.

Dr. Bartolo M. Barone is a graduate of Georgetown University and has a certificate from the National Board of Medical Examiners. He will enter the practice of neurosurgery in Charleston.

Dr. Charlton B. Futch was graduated from the University of Virginia and is licensed in Virginia. He is currently with the U. S. Navy in Charleston.

Dr. Hollister S. Harrison, a graduate of the Medical College of Virginia. is licensed in West Virginia. Currently in the U. S. Army, he plans to locate in Hartsville in August for the practice of pediatrics.

Dr. William H. Hatfield is a graduate of the University of Maryland and a licensee of that state. Dr. Hatfield is on the medical staff of the duPont Savannah River Plant.

Dr. Cecil F. Jacobs was graduated from the Medical College of Georgia. Originally licensed in Georgia, he is with the Department of Public Health in Charleston.

Dr. Craig C. Kuglen, a graduate of the University of Alabama, is licensed in Texas. Dr. Kuklen is an ophthalmologist and currently in the U. S. Army in Columbia.

Dr. Elna A. Lombard, a graduate of the Medical College of Georgia, is licensed in that state. She is a psychiatrist with the Mental Health Center in Aiken.

Dr. Leland R. Matthews was graduated and licensed in Indiana. Dr. Matthews is currently serving in Charleston with the U. S. Navy.

Dr. James E. May is a graduate of the Medical College of Georgia and a licensee of that state. Dr. May, recently released from the service, will continue his surgical residency at the Medical College Hospital.

Dr. William A. Morris is a graduate of the Medical College of Georgia and was licensed in Georgia. He will continue a residency in surgery at Spartanburg General Hosptal.

Dr. Richard L. Pietsch, a graduate of the University of Virginia, holds a Virginia license. Dr. Pietsch is currently with the U. S. Public Health Service in Charleston.

Dr. Gerald J. Quinn is a graduate of Jefferson Medical College and he is licensed in Pennsylvania. Recently released from the service, he will enter the practice of neurology in Charleston.

Dr. David B. Roberts was graduated from the University of Louisville and was licensed in Kentucky. Currently with the U. S. Air Force in Charleston, he will enter a residency in obstetrics and gynecology at the Medical College Hospital.

Dr. Harold R. Rubel, a graduate of the University of Cincinnati, was originally licensed in Ohio. Dr. Rubel practices obstetrics and gynecology in Spartanburg.

Dr. John H. Smith is a graduate of the University of Alabama and was licensed in that state. Dr. Smith is a radiologist in Anderson.

Dr. Samuel S. Spicer was graduated from the University of Colorado. He has a certificate from the National Board of Medical Examiners. Dr. Spicer is with the Department of Pathology of the Medical College of South Carolina.

Dr. William B. Stocking, following graduation from Cornell University, obtained a New York license. He plans to enter general practice at Myrtle Beach.

Dr. Terrell B. Tanner, a graduate of Emory University, is licensed in Georgia. Dr. Tanner plans to practice in the Anderson area.

Dr. Irwin D. Zim is a graduate of Cornell University and has a certificate from the National Board of Medical Examiners. Dr. Spicer is with the Department of Pathology of the Medical College of South Carolina.

Dr. William B. Stocking, following graduation from Cornell University, obtained a New York license. He plans to enter general practice at Myrtle Beach.

Dr. Terrell B. Tanner, a graduate of Emory University, is licensed in Georgia. Dr. Tanner plans to practice in the Anderson area.

Dr. Irwin D. Zim, a graduate of Cornell University, is certified by the National Board of Medical Examiners. A radiologist, he is in the Army and practices part-time in Hartsville.

AMA POSTURE ON PUBLIC COMMENT

WESLEY W. HALL, M.D., Chairman

The AMA Board is cognizant of the great increase in attention being given in the press and broadcast media to medicine and health care. Our profession is now the focus of one of America's greatest interests. It will constantly be in the spotlight, ending the professional reticence and privacy in which medicine functioned most of the time in the past.

Even though this interest is a tribute to the importance of medicine and the public's desire for its benefits, it brings with it the problems facing any person or organization with a key public position: much of the coverage is critical or displays a lack of understanding.

The Board of Trustees has consulted with AMA staff and public relations counsel on this increasingly important situation. The conclusions that have resulted from this intensive and thoughtful consideration are submitted now:

1. When statements about medicine are misguided or unfair, corrective statements will be issued promptly when the facts are available and an orderly response is possible.

2. We must recognize that the prominence and complexity of medicine in the United States today result in many limitations. Medicine is a constant subject of news and comment, much of which cannot be subject to a later response. Often our replies cannot be carried by the broadcast medium or publication, or at best will be much less prominent than the original coverage. Quite often a responsible statement cannot be issued until the facts have been obtained, and these may be scattered about the country or involve a local situation or require a great deal of time.

3. The frequency and complexity of these matters have increasingly diverted the officers and staff of AMA to reacting to what others do and say. This decreases the ability to work on constructive, ongoing activities that are vital to our future.

4. Staff is developing in written form the best possible anticipatory statements regarding all foreseeable circumstances. By having such matters thought out and documented when a need arises, we will be able to reduce the instances of surprise, decrease the time required for response, and assure consistency in AMA statements on these matters.

5. We will concentrate on building a positive posture by getting understanding for medicine's functions and its positions on various considerations; and by educating the press, broadcasters and opinion leaders. This will help forestall much misguided criticism and build a favorable climate that will inoculate aganst susceptibility to unfair criticism.

6. All state and county medical societies are urged to follow these same procedures.

You will see many instances in which AMA responds to public comment, many in which we have acted but our effectiveness will be in correcting the source and may not be visible immediately, and instances when judgment indicates a response should not be made. In each case the best judgment and skills will have been applied to the complexities of the situation.

Regional Medical Program Grant to Expand Training in Cardiopulmonary Resuscitation

Support by the South Carolina Regional Medical Program will accelerate the cardiopulmonary resuscitation training program which the South Carolina Heart Association has been offering for some years to medical and emergency rescue personnel. The grant of $45,000 the first year will underwrite a full time Heart Association staff member who will work with local physicians and hospitals to set up courses, and will finance the purchase of more training manikins and other teaching aids.

Originally, courses in CPR were provided in scattered cities by the few physicians who had been trained in the techniques. During the past year, the program was expanded through the cooperation of the South Carolina Educational Television system to cover many more physicians, nurses, ambulance and rescue squads, policemen, firemen, highway patrolmen, and industrial safety personnel. Additional courses for dentists and lifeguards are now being readied.

Dr. Ambrose G. Hampton of Columbia, chairman of the Heart Association's Cardiopulmonary Resuscitation Task Force, is consultant to the program and instructor in the televised portion of the courses. Alexander (Sandy) du Hays, formerly Program Director of the New Mexico Heart Association, has joined the staff of the South Carolina Heart Association as director of the CPR program. He worked with Dr. Archer Gordon of the Lovelace Clinic in Alberquerque, who is chairman of the American Heart Association's Cardiopulmonary Resuscitation Committee, in developing several of the films and other training aids now in use for teaching CPR.

A course for physicians of the Piedmont and Midlands regions will be given in Greenville on October 18-19, with Dr. James J. Morris of Duke Medical School as instructor. Tickets for the Clemson-Duke game on October 19th have been reserved for those who would like to attend at the end of the session.

More information on the CPR Program and courses may be obtained from the South Carolina Heart Association, 2864 Devine Street, Columbia, S. C. 29205.

SOUTH CAROLINA MEDICAL POLITICAL ACTION COMMITTEE (SCALPEL)

To ALL Physicians:

In one state alone a union can collect more than $400,000.00 a year by assessing each member **only five cents per month** for "political education".

Can you invest $1.67 per month in **your** state and national political action committees?

If each of 1800 physicians in South Carolina join SCALPEL and AMPAC (annual dues $20.00) we could add $36,000.00 annually toward the election of a congress sympathetic to the private practice of medicine and our system of free enterprise.

Send your check today—$20.00 to

113 N. Coit Street
Florence, S. C. 29501

MEETINGS

The 62nd Annual Meeting of the Southern Medical Assn. will be held November 18-21 in New Orleans.

For more information write: Southern Medical Assn., 2601 Highland Ave., Birmingham, Ala. 35205

The Mound Park Hospital Foundation with the joint sponsorship of the University of Florida's J. Hillis Miller Health Center will present the 2nd Annual Postgraduate Conference on "Today's Hospital Problems: An Interdisciplinary Approach" Nov. 7-9.

The conference will be comprehensive and designed for physicians who hold hospital staff leadership positions, hospital administrators, hospital trustees and such allied personnel selected by hospital administration and division chiefs.

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OPHTHALMOLOGY: MISCELLANEA

PIERRE G. JENKINS, M.D. F.A.C.S.

Charleston, S. C.

It is a privilege and honor to be the first guest speaker of this, the Central South Carolina Ophthalmological Society. You are to be commended for organizing a group to promote the interests of our profession.

What will be presented to you tonight defies a suitable title, hoping what will be said will not disappoint or bore you, and to be sure at the outset, I will say that it will not be a scientific treatise or case report which would further contribute to the enrichment of ophthalmic literature.

Our special sphere in medicine, ophthalmology, has attained an acceptable and firm status.

The ascendancy of our specialty has come about by means of forthright attainments in scientific research and the application of the same in our daily practice. Secondly, but none the less, very importantly, the insistence that medical school authorities establish independent and autonomous departments of ophthalmology as a part of their faculties and hospital staff structures.

Continuing education in ophthalmology sponsored by various societies and institutions over the years, has greatly strengthened our specialty. The great extension and high standards of residency training in our country, particularly in the past twenty or thirty years, have stimulated the quality and number of recruits in our midst.

In this connection, a new organization, the Association of University Professors of Ophthalmology, has already formulated new areas of action to further improve research, and also to facilitate and coordinate basic principles in the teaching and training of "budding ophthalmologists" as well as ophthalmic assistants, etc. The speaker was among the first members of this organization and was on its development committee.

The American Association of Ophthalmology has also made valuable contributions in the field of political and public relations, as many of you know, and everyone of us should join this group.

Several years ago another very important development in the matter of research was that of the founding of "Research to Prevent Blindness, Inc." This unique organization was founded by an ophthalmologist, Dr. Jules Stein, who retired and has devoted his full time and means to the promotion of methods of helping to raise funds for the further expansion of existing research eye centers and the creation of new ophthalmic research institutions. Its "Progress Report 1968" gives a most revealing picture of the wide scope and its already solid accomplishments in this field. The final paragraph in this progress report states:

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*Clinical Professor of Ophthalmology, The Medical College of South Carolina, and former Chairman of the Department of Ophthalmology.

Presented at a meeting of the Central South Carolina Ophthalmological Society at Columbia, South Carolina, on March 25, 1968.

"The extraordinary impact of 'Research to Prevent Blindness' on the field of eye research has been accomplished by making a limited amount of money go a long, long way. 'Research to Prevent Blindness' staff remains small. Its administrative and fund raising costs, minimal indeed, if the all too common gauge of bigness is placed on 'Research to Prevent Blindness! Its true stature is hidden. Yet—among the nation's voluntary health agencies, covering all areas of health interest, 'Research to Prevent Blindness is the sixth largest contributor to medical research. The goal, as seen by "Research to Prevent Blindness" trustees, is not only to attract funds from every available source into the main stream of eye research, but to enhance and multiply the effect of every dollar contributed."

The following institutions have been the recipients of assistance: John's Hopkins University, Wilmer Institute; the Jules Stein Eye Institute (the largest eye institute ever constructed at one time) at Los Angeles, California; an eye research building at the University of Louisville Medical School; the Columbia Presbyterian Institute of Ophthalmology in New York City.

$25,000.00 awards by "Research to Prevent Blindness" trustees have been made for outstanding ophthalmic achievement to individuals. Development grants are also made for institutions with "emerging eye research programs."

The organization has given its full support of a National Eye Institute at the National Institutes of Health as an essential element in an intensive research attack against blinding diseases. Legislative action is now pending in Washington in this regard and should receive the active support of all ophthalmologists in this country.

Ophthalmology has further secured a position of eminence in medicine because of the more recent advances in diagnostic procedures and instrumentation, such as fluorescein angiography, new instruments for indirect ophthalmoscopy, tonography, applanation tonometry, the Berman locator, the gonioscope, the ophthalmodynamometer, the newer and more sophisticated visual field equipment, the biomicroscope and ultrasonography. This list is not complete.

In the field of refraction, there are now improved retinoscopy instruments and refractors. In this connection there are those who disdain and rather look down on those of us who still do routine refractions. This attitude should be condemned. The excuse given is that they have no time for refractions, and further infer that it can be done by less qualified and even non-medical persons. Many patients who have refractive problems have also underlying emotional and medical disorders and only a well trained medical refractionist can help them. The upcoming opththalmologist should not belittle what appears to be a simple refraction in his daily schedule of seeing patients. To the younger practitioner there is glamour and indeed higher pecuniary rewards when one is wielding the knife, but there is much satisfaction to those who with patience and skill can bring relief, not simply with a pair of glasses but also with good sound medical advice to the patient.

As we all know, ophthalmology slipped by the wayside, so to speak, in the matter of contact lens wearing, allowing the non-medical people to practically take over this field for several years. The speaker prescribed scleral lenses as far back as thirty or more years ago. Ophthalmologists in more recent years have reasserted their priority and responsibility in this field, and have made notable contributions in this connection. The existence of the "Contact Lens Association of Ophthalmologists" attests to this fact.

In the field of medical therapy, per se, some outstanding contributions come to mind. The discovery by Becker of the beneficial effects of the carbonic anhy-

drase inhibitor drugs in the treatment of glaucoma is foremost. In that disease also the more widespread use of epinephrine products in open angle glaucoma, also some of the new anticholinesterase drugs, the great efficacy of substances, such as urevert preliminary to surgery for acute angle closure glaucoma. All of these were milestones of progress in the treatment of a disease once called the "bug-a-boo" of ophthalmology.

The introduction and use of Idoxuridine (IDU) in viral disease of the cornea added another hopeful chapter to combating an eye disease causing much disability.

The vast amount of work on the antibiotics for local use in eye infections, and later the steroid drugs, shed a new world of light on the problem of ocular infection and inflammation.

The occurrence of a new and blinding condition in premature infants and the dramatic control and reduction of its occurrence have now relegated retrolental fibroplasia to the limbo of preventable causes of blindness.

The story of the discovery of the relation of rubella and cataract in the newborn highlighted much of ophthalmic literature of the nineteen forties. Dr. Algernon Reese, first described it in the American literature and inspired others to report cases.

In the field of surgery, new and wide avenues have opened up for the ophthalmic surgeon. In cataract surgery, new tools have been developed, viz: the operating microscope, the use of zonulysis, and more recently, cryosurgery, have greatly facilitated cataract extractions, and in competent hands have probably caused less trauma and fewer complications. The perfection of finer suture materials and precision needles has afforded a profound advance in intraocular surgery—both elective and traumatic.

In the surgery of glaucoma the basic surgical principle of affording better fluid drainage from the eye has not advanced as much as one would probably expect, but the use of the cautery (one of the oldest procedures used in surgery) in certain cases has resulted in more permanent benefit, viz: the Scheie procedure.

As for the surgery of retinal detachment, one can only say that it has developed to the point where it is on a firm foundation and results are relatively successful in many cases. This was a condition that was considered an utterly hopeless situation when your speaker was a resident and first started in practice. A further development now, of course, is the use of light therapy, and/or the laser beam. The latter also is used for other purposes, such as certain types of retinal disease, retinal hemorrhages, etc.

Corneal transplantation, while not a new concept, has become a living reality in our day, and really a spectacular feat in medicine, predating, but not as glamorous as that of heart transplants.

The above mentioned facts of the achievements in our field, while not by any means exhaustive in this presentation, points up our stature in medicine. Furthermore, we have made great contributions to general medical knowledge and diagnosis by means of detecting early signs of general disease, sometime even before the clinician or laboratory can discover it.

Now—all of these things are self evident and no doubt "old hat" to us, but occasionally it is well to take stock of our assets and then start building for the future.

When we consider that it is estimated that 60 to 70 per cent of eye disorders that cause degrees of blindness, especially in older age groups, are not amenable to treatment or cure, we should sit up and do something about it. Many of these conditions are of the so called degenerative type, about which fundamental basic knowledge is for the most part unknown, and all we can offer is a "talking book." I will admit it is difficult for the busy general practioner of ophthalmology to engage in much original clinical research.

But by using our powers of observation and deduction and recording them, some one or more of us might make a valuable contribution to knowledge and practice. Also a look into the future may bring forth the answers, and probably in many cases the prevention and cure for these heretofore incurable ophthalmic disorders.

Work continues in biochemical research on the lens, together with general medical research on the process of aging in the human body, and from this might come the answer to the prevention of senile cataract and retinal degeneration in older people.

There is also considerable research proceeding along the lines of the use of anti-inflammatory drugs such as indomethacin, which supersede the necessity for the use of steroids. Indomethacin is already in use, as are other drugs still in the experimental stage. Another drug recently reported by Thygeson is Medrysone, which has the advantage of a local steroid solution not affecting the intraocular pressure, and can be used over long periods of time for such conditons as vernal conjunctivities and other allergic states. It may also not affect the lens with long term use. This preparation has not yet been made available commercially.

Interferon, a broad spectrum antiviral agent made by host infected cells, is used to induce the ocular tissues to make their own interferon. According to Herbert Kaufman, it may well provide sufficient protection to decrease the possibility of reactivation of ocular virus infection. It has also been found that purified nucleic acids and other apparently innocuous substances can induce a similar interferon protection.

In the area of chronic wide angle glaucoma, drugs will be devised to mediate and modify better the permeability of the trabeculae in the meshwork of the anterior chamber angle so as to promote better drainage and lowering of intraocular pressure. It is hoped that these drugs will require a minimum of use and be devoid of serious side effects. Some drugs we now have may act in the way described above, but this has not always been practically demonstrated, and therefore could be improved.

Diabetic retinopathy, one of the great destroyers of sight to-day, may be prevented by drugs to be discovered which will zero in on the pituitary and negate the necessity of hypophysectomy, either by craniotomy or by freezing. Of course, the use of the laser, as indicated before for retinal disease, is already giving encouraging results in the treatment of diabetic retinopathy.

Retinal separation will probably always be a surgical problem, in many cases, as far as cure is concerned, but by surgery less mutilating than that now practiced.

The matter of tumor occurrence and malignancy may be eliminated by further work on the possible viral etiology.

Refractions will be performed by means of electronics, viz: Ultrasonography and space age devices, and by remote control (and sans cycloplegia), and if so without that valuable doctor-patient relationship which was mentioned earlier in this presentation.

Contact lenses will continue to be smaller in diameter and thinner and more widely used.

In looking to the future, there should be a change in the recruiting and training of ophthalmologists, first of all, a reduction in the overall number of years required to get the degree of doctor of medicine, by revising premedical curriculum school requirements by at least one or two years of preparation for the study of medicine.

The medical school course itself to be confined to three years, summers included, viz: basic science and preclinical training. The fourth year to consist of a general rotating internship. The aforementioned course would apply to all of those studying medicine.

Then, the actual study of ophthalmology

itself for a person planning to take up ophthalmology as a speciality, to start to some degree during the general internship. Some medical schools are already experimenting in this area.

The residency training program in ophthalmology could be accomplished in two years instead of three, as at present. Intensive didactic work and basic science in ophthamology in general and elementary clinical work should be accomplished in the first four months, then a graduated scale of increasing participation in minor surgical procedures and responsibility given the resident for the next six to eight months. As far as major surgery is concerned, at the first of the second year period, participation as an assistant at major surgical operations, should be started, and in the last nine months the resident should himself be allowed to do major surgery, such as cataracts, but with careful personal supervision by an attending. This would complete the two years of residency. Those who wished to do surgery for retinal detachment or corneal transplants should take another four to six months in that work, preferably at a large ophthalmic center where the volume of such work is great.

Of course the above outline of a suggested future training program for "Budding Ophthalmologists" is now "Verboten" by the powers that be and the hierarchy that controls medical education and our speciality. In order to encourage more good men to go into medicine and ophthalmology, in particular, such a plan should be forthcoming and this would not dilute the quality of training given if the right candidates are chosen and dedicated and unselfish people have the responsibility of directing it.

Change is healthy and strengthening to any health training program, and ophthalmology will continue to be foremost in the so called medical or surgical specialties when a new direction and elimination of wasted time in our present course is brought about.

An intensification and acceleration of basic research in ophthalmology, especially in the field of biochemistry and its relation to the function and the physiopathologic changes in the eye must proceed without delay. This will continue to be done by a relatively few and gifted souls in ophthalmology and the allied sciences. This is essential to the enrichment of knowledge of the "general practioner of ophthalmology" who, in turn, translates these things in great benefits to his visually crippled patients. After all, the general practitioners of medicine as well as the general practitioners of ophthalmology, are the unsung heroes in the battle against death, and of the prevention of blindness and making the blind see.

Dr. Henry E. Sigerist, the great modern medical historian, in his preface to his book, "The Great Doctors" published some 30 years ago, said this in his dedication and preface: "To the unknown doctor, who, in his unselfish and inconspicuous activities, fulfills the teachings of the great doctors."

"Is there anything uncongenial about a record in which no reference is made to any other than supreme achievements? Must we not feel that there is a great gulf fixed between ourselves and the pathfinders of medicine? No: For, throughout the centuries, we and they are linked by our common physicianship. One and all, in their several places, at the bedside or in the laboratory or at the writing desk, were doctors. They were advancing towards the same goal as ourselves, pioneers on the road along which we of to-day still travel. We are about to study the life of each one of them, with its peaks and its valleys; to learn that, like us, they fought and suffered and erred; that, like us, they experienced joy and sorrow. To a large extent we shall recognize our own images in them. The fact that they were privileged to reach supreme heights makes them our masters and exemplars, the thought of whom can encourage and invigorate us when the trivialities of the daily round are

tending to dim our faith in the spendour of our calling.

"Bach and Mozart would be dead forever, were it not for the living artists who are perpetually reviving their melodies. Pasteur and Koch would have lived in vain but for the everyday practitioners through whose activities their teachings are made effective. It is not so much the great theoreticians upon whom the health of the community depends, as the huge army of family doctors who succour the ailing from hour to hour."

While not family doctors, nevertheless we have the same heritage of which Dr. Sigerist writes, at least in the practice of ophthalmology. Most of us here are "General practitioners" of that science and art, and whether this branch of medicine with which we are identified continues to grow and advance and be a benefactor to mankind, depends on our constant, dedicated and prayerful concern for its welfare.

This, you will continue to be doing as individuals as well as a group in this Central South Carolina Ophthalmological Society.

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50 YEARS AGO



October 1918

A fairly long editorial on the subject of the Influenza Epidemic, the scarcity of physicians and nurses in the state, and the programs of the pandemic, was the chief article in this issue.

THE PRISONERS

By Robert Quinn, M.D.

I fancy, somehow, that this day's the same
As when those first seeking freedom came
With native pine and oak and sky to stand
Heart-captives to this miracle of land.



It won't do the job.

Neither will protection which pays for only a small portion of hospital and/or surgical costs.

Blue Cross and Blue Shield pre-payment plans are today's best answer for surgical and hospital protection.

Blue Cross®–Blue Shield®

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications, an adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

NEW SINGLE CHEMICALS

ANTIHEMOPHILIC FACTOR (Human), METHOD FOUR

Biological. Rx

Manufacturer: Hyland Laboratories

Nonproprietary Name: Antihemophilic factor, human (factor VIII, AHF, AHG)

Indications: Classical hemophilia (hemophilia A); patients with acquired factor VIII inhibitors.

Contraindications: None known.

Dosage: Must be individualized.

Supplied: Dried powder with diluent—10 ml vial, 300 and 450 AHF units. 30 ml vial, 900 AHF units.

IMURAN

Renal homotransplants. Rx

Manufacturer: Burroughs Wellcome & Co.

Nonproprietary Name: Azathioprine

Indications: Adjunct for the prevention of rejection in renal homotransplants.

Contraindications: Hypersensitivity to the drug.

Dosage: 3 to 5 mg/kg/day, orally. Must be individualized.

Supplied: Tablets—50 mg, bottles of 100.

DUPLICATE SINGLE PRODUCTS

CHLOROPTIC

Eye preparation. Rx

Manufacturer: Allergan Pharmaceuticals

Nonproprietary Name: Chloramphenicol

Indications: Bacterial conjunctivities and other superficial ocular bacterial infections caused by organisms sensitive to chloramphenicol.

Contraindications: Hypersensitivity to the drug.

Dosage: One or two drops q.4h., day and night for the first 72 hrs. Therapy should be continued for 48 hrs. after an apparent cure has been attained.

Supplied: Plastic dropper bottles—7.5 ml, 5 mg/ml

T-I-GAMMAGE

Biological. Rx

Manufacturer: Merck Sharp & Dohme

Nonproprietary Name: Tetanus immune globulin, human

Indications: Passive tetanus prophylaxis.

Contraindications: None mentioned.

Dosage: Adults—250 units, i.m. Children— 4 units/kg. body wt., i.m. Must not be injected intravenously.

Supplied: Disposable syringe of 250 units.

COMBINATION PRODUCTS

OVRAL

Progesterone/estrogen comb. Rx

Manufacturer: Wyeth Laboratories

Composition: Norgestrel 0.5 mg. Ethinyl estradiol 0.05 mg.

Indications: Oral contraception.

Contraindications: Thrombophlebitis, or history of thrombophlebitis or pulmonary embolism, liver dysfunction or disease, known or suspected carcinoma of breast or genital organs, undiagnosed vaginal bleeding.

Dosage: Beginning on day five of menstrual cycle, one tablet daily for 21 days. Skip 7 days before starting next cycle.

Supplied: Tablets—21 per dispenser, packets of 6.

NEW DOSAGE FORMS

LASIX Injection

Diuretic—Other. Rx

Manufacturer: Hoechst Pharmaceutical Co.

Nonproprietary Name: Furosemide

Indications: Edema associated with congestive heart failure, liver cirrhosis, and renal disease including the nephrotic syndrome. To be used when oral administration is not possible.

Contraindications: Anuria, hepatic coma, electrolyte depletion, hypersensitivity to the drug. Therapy should be discontinued if increasing azotemia and oliguria occur during treatment of progressive renal disease.

Dosage: 20 to 40 mg, i.m. or i.v. A second dose may be given two or more hours after the first. Not to be used in children.

Supplied: Ampuls—2 ml., 10 mg./ml.

The American Academy of Clinical Toxicology has been founded for the advancement of clinical toxicology, a medical specialty concerned with the diagnosis and treatment of poisoning and drug intoxication.

The purposes of the Academy are to encourage clinical investigation, to promote the development of diagnostic and therapeutic methods, to foster among practicing physicians a better understanding of the treatment of poisoning, and to improve the medical care received by the posioned patient.

Whatever happened to polio? According to the S. C. State Board of Health it is nearly exterminated, both in South Carolina and the U. S. No cases of paralytic infantile paralysis have been reported in the State this year and only a minimal number in the nation.

OLIN BURNHAM CHAMBERLAIN
IN MEMORIAM

A Resolution of the Medical Society
of South Carolina, Sept. 12, 1968

On June 30, 1968 Olin Burnham Chamberlain, a beloved member of this society, died after a long illness initiated by cerebral thrombosis.

Born in Charleston, South Carolina, June 25, 1892, the son of Norman A. Chamberlain and Julia Davis Chamberlain, he attended the public schools of Charleston, graduating from the Charleston High School in 1910 with top honors and winning the Colcock medal. In the fall of the same year he entered the College of Charleston, graduating in 1914 with a distinguished record. While there he played on the varsity football team and at one time managed it. He was robust and powerful though agile and graceful in his movements. It is believed that he could have made a place on any college football team at that time. He was a very popular member of the student body not only on account of his physical prowess and his scholarly attainments but for his gentle and kindly friendliness, his keen wit and sense of humor. He had already become noted for his "Tall Tales" and amusing stories.

While at the college he joined the Washington Light Infantry and being a good marksman was sent to Camp Perry on the South Carolina team. In the fall of 1914 he entered the Medical College of South Carolina and was first honor graduate in 1918. Immediately after graduation, with two of his classmates, he volunteered his services to help combat the severe influenza epidemic in New England. This noble gesture on his part went for naught for he, himself, contracted the disease and barely escaped with his life. After recovery he accepted an internship at the Philadelphia General Hospital (Blockley). After completion of his service there he returned to Charleston to accept the position as chief of the intern staff at Roper Hospital. He later entered the private practice of medicine in Charleston where with his skill and conscientious service he soon won a large following. During these years he also filled in as temporary professor of biology at the College of Charleston and as assistant in medicine at the Medical College.

Although enjoying a successful career in internal medicine his chief interest lay in the field of psychiatry and neurology. He directed his studies in this field and prepared himself further by doing post graduate work in London and at Harvard University, after which he specialized in this branch of medicine. He was advanced to Associate Professor of Medicine at the Medical College of South Carolina and lecturer on psychology at the College of Charleston.

Throughout the following years he became well established as a psychiatrist and gained recognition throughout the state for his competency. He was elected to membership in the College of Physicians and became a consultant at the State Hospital.

During World War II he was accepted in the Army Medical Corps with the rank of major and sent to New Orleans, Louisiana as Assistant Chief of Neuropsychiatry at the Lagarde General Hospital. Later he became Chief of Neuropsychiatry at Bushnel Hospital at Brigham City, Iowa. He was promoted to colonel and remained there until the termination of the war. It is interesting to record that while in the Army Colonel Chamberlain served as advisor in a series of medical educational films by Metro-Goldwyn in Hollywood in 1944.

On his return to Charleston in 1946 he was made full time professor of neuropsychiatry at the Medical College, the first to occupy this newly established chair.

He was named as the first director of the Mental Hygiene Clinic of Charleston

in 1947 and was elected to the board of the State Hospital in Columbia.

In addition to his duties at the Medical College he was consultant in mental diseases at Roper Hospital.

Among the many honors bestowed upon him was his election as president of the South Carolina Medical Association and president of the Medical Society of South Carolina. During his service in this capacity he led the movement which led to the establishment of the Charleston County Medical Society.

The tragic illness of Olin Chamberlain, beginning many years ago, brought much sorrow to the members of this society who admired and respected him, and to many of the older group who knew him best there was abiding love and affection. The long years of discomfort and mental and physical deterioration were heartrending to those who cared for him.

However, the recollection of his fine gift of character, personality and charm will long remain to give flavor to their memories.

To his family the Medical Society wishes to express deep and enduring sympathy and will inscribe a page in the minute book to his memory.

DEATHS

Dr. Theodore G. Bernthal

Dr. Theodore G. Bernthal, 64, of Charleston, chairman of the department of physiology at the Medical College of South Carolina, died September 1 at a local hospital.

He was born in 1904 at Grand Rapids, Michigan. Dr. Bernthal was graduated from the University of Michigan in 1930 and served a year's internship at Rochester General Hospital. He came to Charleston in 1946 after serving on the faculties of the University of Michigan and Vanderbilt University.

From 1952 to 1960, Dr. Bernthal served as consultant in basic sciences to the Veterans Administration Hospital in Columbia.

He was chairman of the Research Committee of the S. C. Heart Association from 1960 to 1965 and consultant in neurophysiology at the S. C. State Hospital from 1960-1964.

Dr. Bernthal was a national leader in research in respiratory and circulatory physiology. He authored or co-authored more than 50 scientific papers on the control mechanism of circulation and respiration. In 1967 he was named to a National Institute of Health study group with responsibility for making recommendations on grants for graduate study in physiology.

Dr. Bernthal was a member of Alpha Omega Alpha, Sigma Xi, Phi Sigma, the American Physiological Society, the American Association for the Advancement of Science, the Society for Clinical Research, the S. C. Academy of Sciences, the Charleston County Medical Society and the Medical Society of S. C.

Dr. Thomas M. Moore

Dr. Thomas M. Moore, 76, of Rembert died September 2 at Kershaw County Memorial Hospital in Camden.

Dr. Moore was graduated from the Medical College of South Carolina and practiced medicine in Rembert for 50 years. He was a veteran of World War I.

Dr. Paul Cleveland Wheeler

Dr. Paul Cleveland Wheeler Jr., 46, an associate of the S. C. Mental Health Commission for 10 years, died August 13 at his home in Columbia.

He was born in Louisville, Ky., a son of Dr. and Mrs. Paul Wheeler. He was graduated from the Medical College of South Carolina. Dr. Wheeler was a veteran of the Korean Conflict.

Dr. Milton Jacob Schreiber

Dr. Milton Jacob Schreiber, 62, died August 10 at his home, the Terraces, in the Charlotte Thompson community of Kershaw County.

Dr. Schreiber moved to Camden in 1963 to join his brother Dr. Herbert Schreiber, at the Henry J. Schreiber Memorial Clinic, named for their late father who died in 1962.

Dr. Schreiber was born in New York, N. Y., the son of the late Dr. Henry J. and Rose Loewinthau Schreiber. He was a specialist in obstetrics and gynecology and was a graduate of New York University and the Long Island College of Medicine.

He was associated with the Lutheran Hospital and Harlem Hospital in New York. He was associate attending physician at Mother Cabrini Hospital in New York. He was a Fellow of the American College of Surgeons and Diplomate of the Board of Obstetrics and Gynecology, as well as a member of the New York State Medical Society.

Dr. Schreiber was serving on the staff of Kershaw County Memorial Hospital and was a member of the Kershaw County Medical Association.

He was a pioneer in the use of pitocin in obstetrics.

SOURCES OF INFORMATION ON SEX COUNSELLING

(The following information received by Dr. John Hawk from Dr. David Mace, speaker at our recent Annual Meeting, should be useful. *Editor*)

Here is some information to pass on to your physicians who are interested in sex counselling. The book I would recommend strongly is by Dr. Richard Klemer, entitled "Counseling In Marital and Sexual Problems: A Physician's Handbook", published by Williams & Wilkins Company, Baltimore, in 1965. This is a symposium, the writers being capable and qualified people, and the field well covered.

Interested physicians should also see the new journal, "Medical Aspects of Human Sexuality", published monthly by "Clinical Communication, Inc.", 250 East 39th Street, New York, N. Y. 10016. The subscription rate in $20.00 per year; but I believe that some physicians receive it free. The articles in it are by acknowledged specialists in the field, and the topics are oriented to clinical practice.

Interested physicians should also make a point of seeing the Newsletter of the Sex Information and Education Council of the U. S. (SIECUS), which will be sent for $4..50 a year. It should be ordered from SIECUS Publications Office, 419 Park Avenue South, New York, N. Y. 10016. The Newsletter is full of information about books, courses, articles, visual aids and the like, all up-to-date and of great value to a physician at work in this field.

A more advanced publication is "The Journal of Sex Research", published four times a year by the Society for The Scientific Study of Sex, Inc. This can be ordered for $10.00 a year from 12 East 41st. Street, New York, N. Y. 10017. The Society holds meetings and conferences, most of them in New York City.

A new organization, The American Association for Sex Educators and Counselors, has recently been started, with its headquarters at 815 15th St., N. W., Washington, D. C. Membership is open to all interested professional persons. The Association does not produce any regular publications at present.

"The valuable property of "clinical instinct" which, although sometimes ridiculed as the assumed armour and decoration of the ignoramus or the quack, has a certain resemblance to the peetic faculty, and moreover is a real asset in practice. Clinical instinct is the power of arriving without a conscious logical process at a definite conclusion, and is often possessed in a high degree by old nurses who know, but cannot give reasons, whether a patient is going to recover or die, and by practioners of long experience who similarly cannot explain the steps by which they reach a diagnosis and prognosis. It may be assumed that they unwittingly draw on a buried experience which, without their conscious remembrance, recognises in the patient signs presented by one in the long past. In diagnosis, therefore, there are the two processes, the consciously logical and the rarer, but not necessarily less correct, unconscious.

Sir Humphry Rolleston (1862-1944)

Report of the Memorial Committee

On Wednesday afternoon, May 15, 1968 at the Scientific Session, Dr. J. R. Sosnowski, Charleston, S. C., delivered the Report of the Memorial Committee, as follows:

Mr. President, Members, and Guests:

Usually, when we memorialize our deceased colleagues, we do so from our point of view. Today I ask that in respectful and happy recollection, we think of them from what might be their point of view, and that you join me in imagining a letter that they might have written to us:

Dear Friends Assembled at Myrtle Beach:

During the past year some of us simply could not resist the invitation which read: "Come unto me all ye that labor and are heavy laden, and I will give you rest."

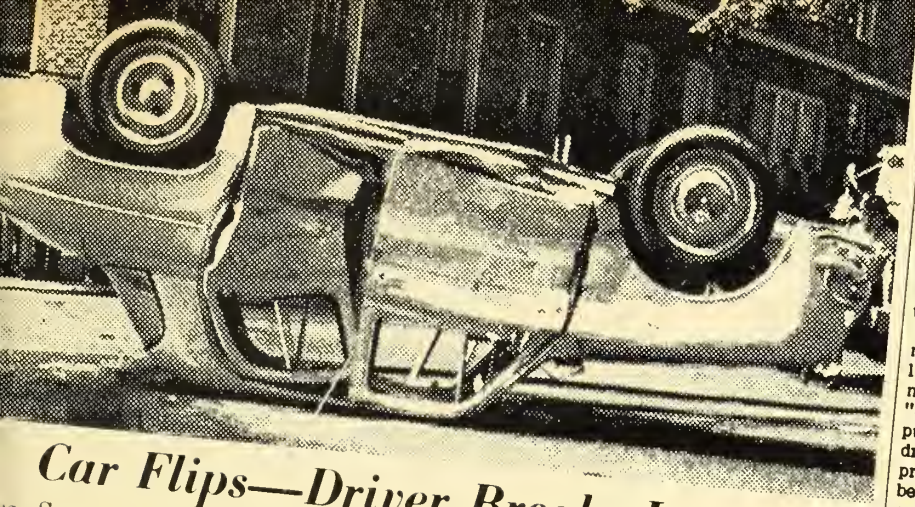
Not all our time together was labor, however. We had a lot of fun right here at Myrtle Beach and back in our home communities. Surely by now you have forgiven us for the times when you held four kings and we held four aces. And we understand for the first time why, with the same bait, and the same tackle, and fishing right beside you, you got all the strikes and we got none. And we still find it dificult to keep an accurate golf score once we've exceeded par.

And then, there were our jokes. Some of them were classic and deserve to be perpetuated. Some should never have been told in the first place. We leave that to your discretion.

Seriously, whatever we did that was good, improve on it and use it for teaching. Whatever we did in error, use that for teaching, too, that the error will not be repeated.

Finally, do not mourn for us, even though some of us appeared to leave prematurely, for with God a thousand years is but as a day and a day as a thousand years—And here we have found peace which passes all understanding.

Name and Address	Born	Died
Beasley, William P., Columbia	1879	March 12, 1968
Black, Robert, Bamberg	1882	April 7, 1967
Brice, Joseph M., Kingstree	1903	May 8, 1968
Burgess, Warren Hamilton, Sumter	1888	May 8, 1967
Cheatham, M. Whitfield, Columbia	1887	September 12, 1967
Craig, Larry, Whitmire	1933	April, 1967
Crooks, William Edgar, U. S. Navy	1891	September 27, 1967
Evans, Walter M., Moncks Corner	1891	January 2, 1967
Farmer, Rudolph, State Park	1897	October 23, 1967
Fishbourne, William K., Moncks Corner	1880	February 2, 1968
Fulmer, Warren Edward, Columbia	1885	February 11, 1968
Hancock, Homer Jackson, Anderson	1909	August 5, 1967
Harrot, Frank Turner, Aiken	1909	March 13, 1967
Hartzog, Leighton A., Olar	1884	October 19, 1967
Josey, Richard Bedon, Columbia	1908	June 29, 1967
Kruger, Victor L., Clinton	1894	March 22, 1967
Martin, William T., Greenville	1889	April 7, 1967
McCutchen, George Thomas, Columbia	1909	September 12, 1967
McNulty, Robert B., Jr., Columbia	1910	December 28, 1967
Miles, Louis Smith, Summerville	1901	September 13, 1967
Moore, Charles M., Charleston	1893	September 26, 1967
Moore, Matthew S., Charleston	1886	December 27, 1967
Neil, Robert B., Columbia	1918	April 8, 1968
Reynolds, T. Willard, Charleston	1909	June 2, 1967
Russell, O. Raymond, Conway	1909	August 10, 1967
Scurry, Carroll Jenkins, Greenwood	1893	July 1, 1967
Smothers, Archer L., Anderson	1874	June 26, 1967
Stukes, Lionel Chalmers, Summerton	1879	July 8, 1967
Switzer, Paul Kent, Sr., Union	1885	April 22, 1967
Thompson, William C., Anderson	1874	Nov. 8, 1966
Townsend, Maurice L., Society Hill	1877	March 23, 1968
Wallace, John, Columbia	1882	May 18, 1967
Watson, Archie C., Greenville	1890	November 4, 1967



STAFF PHOTO

Car Flips—Driver Breaks Leg

...s, Sept. 7. John P. Jones of ... incurred a broken leg today ... driving ... Patrolman B. R. Brown, the car hit a fire hydrant and flipped over on its ... Hasn't he ... itar...

statemer... issue, a... tember t... fications' ... ton dicta... Althou... made Mo... down by a ... ter shar... flat obje... was pass... Board ... McCredi... tion" s... elimir... the st... The c... ment ca... limit ra... mile li... "cut-of... public ... dren ... priv... be b... or th... schoo... The ... so so... rathe... burs...

He's had enough excitement for one day.

For the patient who has been through an accident, the worry and anxiety following the experience may actually heighten the perception of pain. This is why there's a classic 1/4 grain *sedative* dose of phenobarbital in Phenaphen with Codeine—*to take the nervous "edge" off,* so the rest of the formula can control the pain more effectively.

Phenaphen® with Codeine

Phenaphen® with Codeine No. 2, No. 3, or No. 4 contains: *Phenobarbital* (1/4 gr.), 16.2 mg. (Warning: may be habit forming); Aspirin (2 1/2 gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, 1/4 gr. (No. 2), 1/2 gr. (No. 3), or 1 gr. (No. 4). (Warning: may be habit forming).

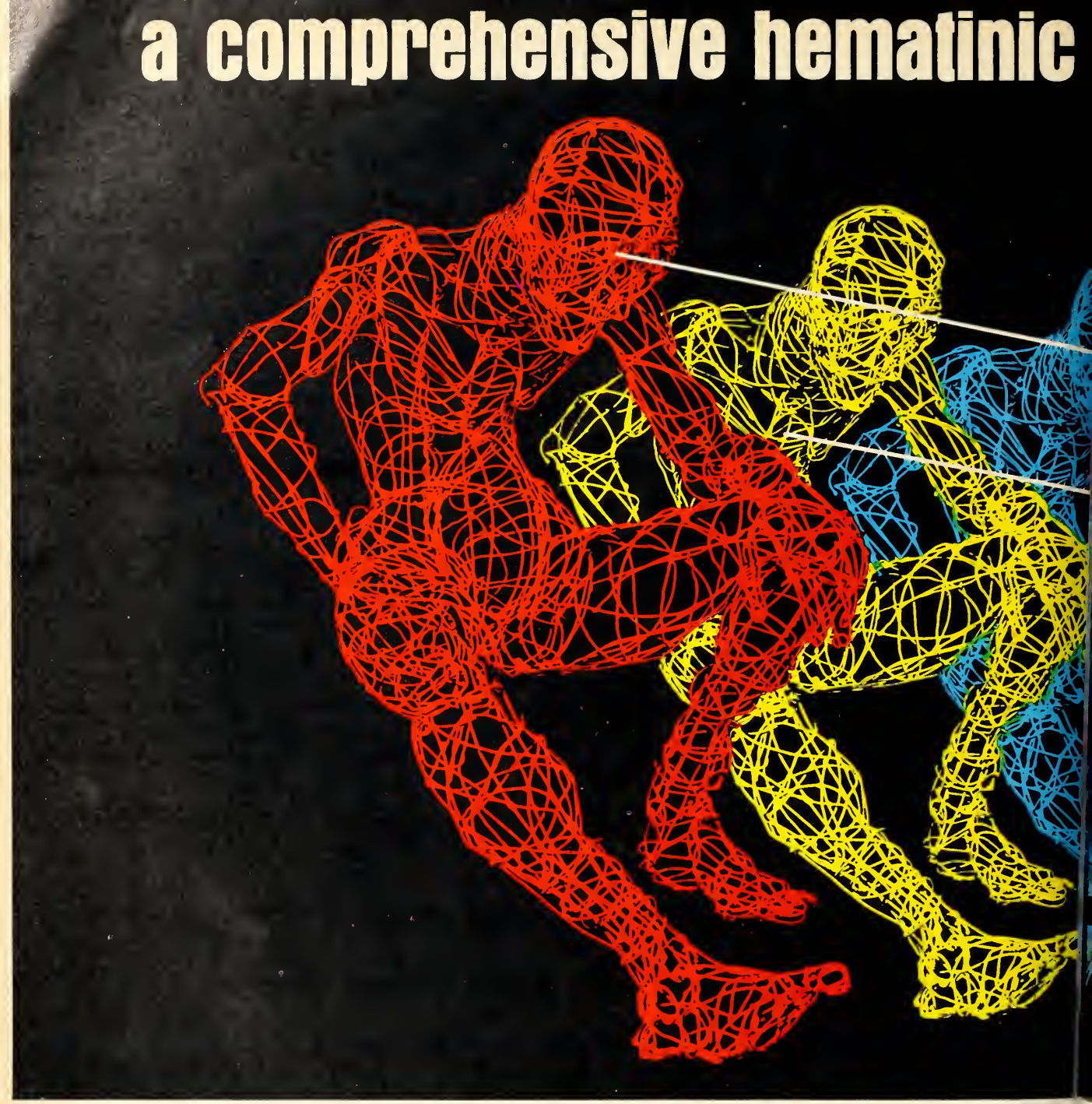
THE COMPOUND ANALGESIC THAT CALMS INSTEAD OF CAFFEINATES

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** 1 or 2 capsules at 2 to 4 hour intervals, or as directed by physician. For further details see product literature.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220 A·H·ROBINS



a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150	mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5	mcg.
Iron, Elemental (as Ferrous Fumarate)	110	mg.
Ascorbic Acid (Vitamin C)	75	mg.
Folic Acid	1	mg.

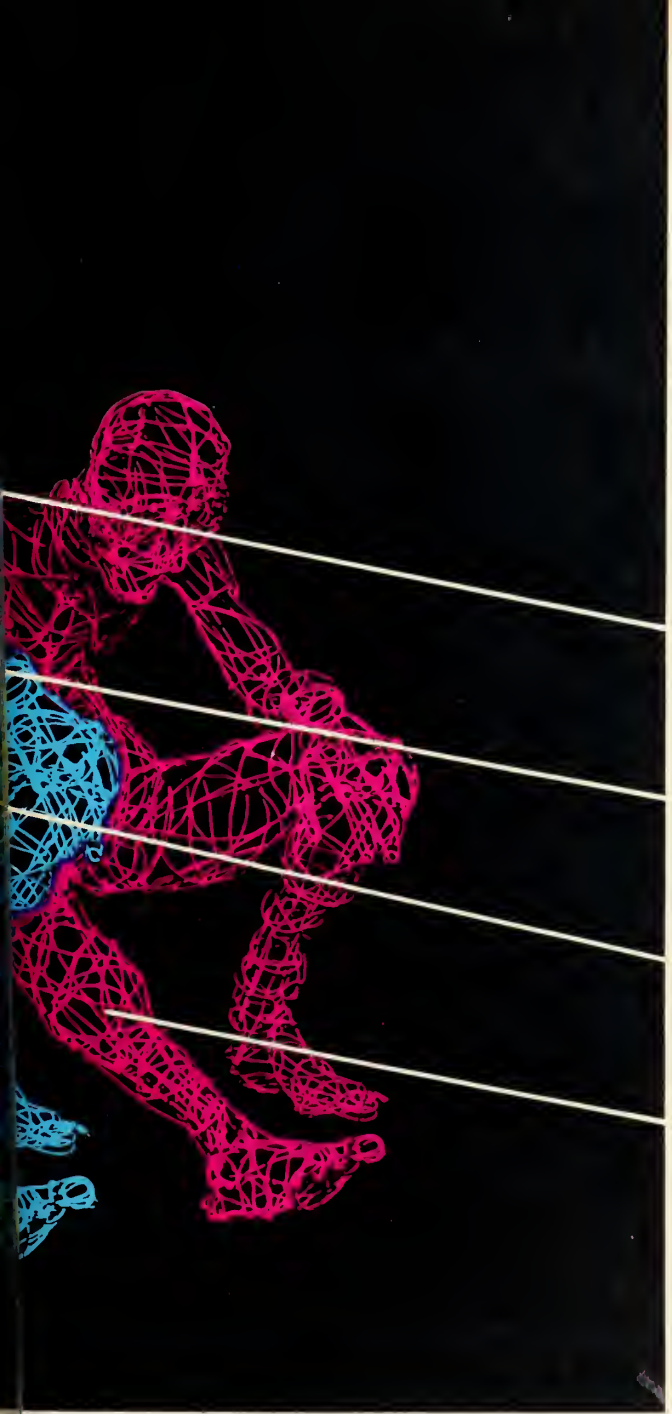
Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appropri investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without adeq vitamin B_{12} therapy may result in hematologic remission but rological progression. Adequate doses of vitamin B_{12} (paren or oral with potent intrinsic factor as in Trinsicon® [hema concentrate with intrinsic factor, Lilly]) usually prevent, hal improve the neurological changes.

As with all preparations containing intrinsic factor, resist may develop in some cases of pernicious anemia to the pote tion of absorption of physiological doses of vitamin B_{12}. If re ance occurs, parenteral therapy, or oral therapy with so-c massive doses of vitamin B_{12}, may be necessary. No single men fits all cases, and the status of the patient observe follow-up is the final criterion for adequacy of therapy. Per



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

nical and laboratory studies are considered essential and are commended.

verse Reactions: In rare instances, iron in therapeutic doses oduces gastro-intestinal reactions, such as diarrhea or constiion. Reducing the dose and administering it with meals will imize these effects.

n extremely rare instances, skin rash suggesting allergy has owed oral administration of liver-stomach material. Instances apparent allergic sensitization have also been reported after l administration of folic acid.

sage: One Pulvule twice a day. (Two Pulvules daily produce a ndard response in the average uncomplicated case of pernius anemia.)

w Supplied: Pulvules Trinsicon® (hematinic concentrate with insic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

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Lilly

the antacid puzzle

In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

"will this one taste O.K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients – after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



'Empirin'®

Compound with Codeine Phosphate gr. 1/2 No. 3

ach tablet contains:
odeine Phosphate gr. 1/2 (Warning—
ay be habit forming), Phenacetin gr. 2 1/2,
spirin gr. 3 1/2, Caffeine gr. 1/2.

eeps the promise
f pain relief

N. & Co.' narcotic products are
ss "B", and as such are available on oral
scription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

New

Therapeutic breakthrough in non-narcotic control of the pain of

Tegretol®
carbamazepine

trigeminal neuralgia

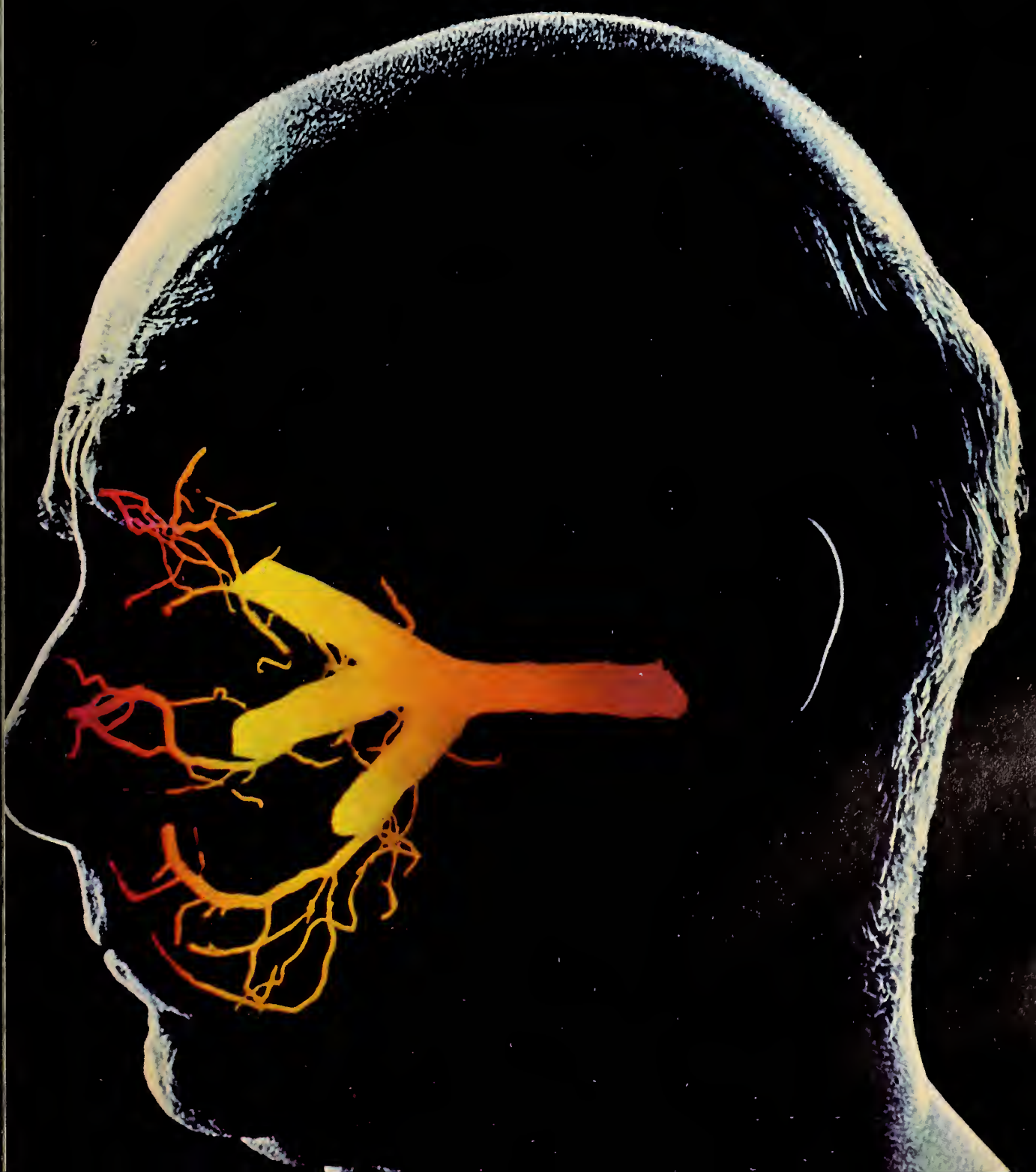
Warning
Fatal cases of aplastic anemia have been reported following treatment with Tegretol. Agranulocytosis, thrombocytopenia and transitory leukopenia have also been observed.
Complete blood and platelet counts should be done prior to and at regular intervals during treatment with the drug (see recommendations under "Important Note and Precautions") to help in the early detection of serious bone marrow injury. Abnormalities in initial blood tests should rule out use of the drug. Also, patients should be made aware of such early toxic signs of a potential hematologic problem as fever, sore throat, mouth ulcers, easy bruising and petechial or purpuric hemorrhage. Should such signs appear, the patient should be advised to discontinue the drug and to report to the physician immediately.

Indication Tegretol is indicated in the treatment of the pain associated with true trigeminal neuralgia. It is not a simple analgesic and should never be administered for relief of trivial facial aches or pains.
Contraindication Do not use in those with a known sensitivity to any tricyclic compound or in those being treated with M.A.O.I. agents. As long a period as possible should elapse before using Tegretol in patients who have been treated with M.A.O.I.'s, with a minimum of 7 days. In such cases, initial dosage should be low and the patient's reaction to gradual increments closely observed.
Important Note and Precautions Familiarity with the clinical symptoms which lead to an accurate diagnosis of true trigeminal neuralgia and with the complete prescribing information, careful patient selection, a thorough examination before treatment and close patient supervision throughout the treatment period are essential to the safe and effective use of this drug.
Where feasible, Tegretol should not be used in conjunction with any potent drug which may increase the possibility of toxic reactions.
In pregnancy, the drug should not be prescribed during the first trimester and thereafter only to patients in whom the clinical situation warrants the potential risk. It should not be administered to nursing mothers.
Patients with increased intraocular pressure should be closely observed during treatment with this drug because of its anticholinergic effect.
Because of the drug's relationship to other tricyclic compounds, the possibility of activation of latent psychosis and, in the elderly, of confusion or agitation, should be considered.
Dizziness and drowsiness may occur and patients should be cautioned about the hazards of operating machinery or automobiles and of engaging in other hazardous tasks.
Use cautiously in patients with a history of coronary artery disease, organic heart disease, congestive failure or liver disease.
Before initiating therapy, the following laboratory procedures should be performed:
1. Complete blood and platelet counts which, if abnormal, should rule out the use of the drug.
2. Baseline evaluations of liver function.
During treatment with Tegretol, the following laboratory procedures should be performed:
1. Complete blood and platelet counts should be done at intervals of one week during the first month of drug treatment, every two weeks during the second and third months, and at monthly intervals thereafter for as long as the patient is taking the drug. A trend toward a decreasing white blood cell count should suggest a dosage reduction and more frequent laboratory and clinical evaluations. Should this trend continue, the d should be discontinued.
2. Liver function tests must be performed at regular intervals during ment with this drug since liver damage may occur during therapy. Th drug should be discontinued immediately in cases of aggravated live dysfunction or active liver disease.
3. Periodic eye examinations, including slit-lamp, funduscopy and ton etry, are recommended for patients being treated with this drug sinc many phenothiazines and related drugs have been shown to cause e changes.
4. Complete urinalysis and BUN should be done on patients treated Tegretol because of observed renal dysfunction.
Adverse Reactions Dizziness, drowsiness, unsteadiness on the feet, nausea, vomiting, aplastic anemia, transitory leukopenia, agranulocyt eosinophilia, leukocytosis, thrombocytopenia, purpura, abnormalities liver function tests, cholestatic and hepatocellular jaundice, urinary f quency, acute urinary retention, oliguria with elevated blood pressure albuminuria, glycosuria, elevated BUN, microscopic deposits in the u impotence, disturbances of coordination, confusion, headache, fatig blurred vision, transient diplopia and oculomotor disturbances, spee disturbances, abnormal involuntary movements, peripheral neuritis a paresthesias, depression with agitation, talkativeness, nystagmus, tin nitus, paralysis and other symptoms of cerebral arterial insufficiency pruritic and erythematous rashes, urticaria, Stevens-Johnson syndro photosensitivity reactions, alterations in skin pigmentation, exfoliativ dermatitis, alopecia, diaphoresis, recurrence of thrombophlebitis, er multiforme and nodosum, aggravation of disseminated lupus erythen tosus, gastric distress, abdominal pain, diarrhea, constipation, anor dryness of the mouth and pharynx, glossitis, stomatitis, fever, chills, adenopathy, lymphadenopathy, aching joints and muscles, leg cram conjunctivitis, left ventricular failure, aggravation of hypertension, h tension, syncope and collapse, edema, aggravation of coronary arte disease and congestive heart failure. (Whether these cardiovascular are drug-related is not known. However, some of these complicatio resulted in fatalities.) The necessity for discontinuing the drug shou dictated by the gravity and severity of the adverse reactions.
Dosage and Administration The drug should always be taken with n if possible.
Initial: One-half tablet (100 mg.) b.i.d. on the first day. Thereafter, th should be increased in one-half tablet (100 mg.) increments every 1 until freedom from pain is achieved. To relieve pain, between 200 m 1200 mg. per 24 hours may be necessary.
Maintenance: Initial control of pain can be maintained in most patie with a dose of 400 mg. to 800 mg. daily. Maintenance doses may ra between 200 mg. and 1200 mg. daily.
At least once every 3 months during treatment period attempts sho made to discontinue the drug or to reduce the dose to the minimum effective level.
Availability Round, white, single-scored tablets of 200 mg. in bottl of 100 and 1000. (B)46-8
For complete details, please see Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

Geig

uncommon relief of uncommon pain



The Divorced Depressive: "Forty, Forgotten

"Had a large wedding."
"Had a fine home and family."



TO-5757

„Forlorn"

"ad a divorce."
'm a real loser,
nd so are
ne kids."



The loss of marital compatibility results in nearly 500,000 U.S. divorces each year.

Depression characterized by untold guilt feelings, grief and loneliness may follow.

When you diagnose depression, Tofrānil may be indicated for relief.

As maintenance therapy during the active phase of depression, Tofrānil can often help prevent relapse.

The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated. In patients with cardiovascular disease, thyroid disorders, increased intraocular pressure; in those receiving anticholinergics (including antiparkinsonism agents), thyroid medication or antihypertensive adrenergic neuron-blocking agents; and in those in their first trimester of pregnancy – the special precautions listed in the Prescribing Information should be carefully observed.

Toxic reactions severe enough to require discontinuation of Tofrānil are uncommon. However, for complete details, please refer to the complete Prescribing Information.

Turn page for brief summary of Prescribing Information.

in depression

Tofrānil® imipramine hydrochloride
Geigy

in depression





Tofrānil® Geigy

imipramine
hydrochloride

Tofrānil®, imipramine hydrochloride
Indications: Tofrānil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, it should not be used during the first trimester of pregnancy. Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy. Because of its anticholinergic effect, caution should be observed in prescribing the drug for patients with increased intraocular pressure.
In rare instances, transient cardiac arrhythmias have occurred in hyperthyroid patients and in patients receiving thyroid medication when this compound was added to the regimen. Imipramine may block the pharmacologic activity of guanethidine and other related adrenergic neuron-blocking agents.
The drug is not recommended at the present time in patients under 12 years of age.
Adverse Reactions: Dryness of the mouth, tachycardia, constipation, disturbances of accommodation, sweating, dizziness, weight gain, urinary frequency or retention, nausea and vomiting, peripheral neuritis, mild parkinson-like syndrome, tremors, rare cases of falling in elderly patients, confusional states (with such symptoms as hallucinations and disorientation), activation of psychosis in schizophrenics and agitation (including hypomanic and manic episodes) which may require dosage reduction and/or addition of a tranquilizer or temporary discontinuation of the drug, epileptiform seizures, orthostatic hypotension and substantial blood pressure fall in hypertensive patients, purpura, transient jaundice, bone marrow depression including agranulocytosis, sensitization and skin rash including photosensitization, eosinophilia, and mild withdrawal symptoms on sudden discontinuation after prolonged treatment with high doses. Occasional hormonal effects (impotence, decreased libido, and estrogenic effects) may be observed. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those using anticholinergic agents (including antiparkinsonism drugs).
Outpatient Adult Dosage: Initially, 75 mg. daily, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
(B)R-46-850-C

For complete details, please refer to the full Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

TO-6757



"Man's best friend" in wintertime diarrheas

In winter "flu" and viral gastroenteritis, Donnagel (4 oz. size!) can bring aid and comfort to sufferers from both diarrhea and its discomforts because it contains kaolin and pectin plus belladonna alkaloids (as in Donnatal®). Donnagel treats the whole diarrhea problem. Available on your prescription or recommendation. A. H. Robins Company, Richmond, Va. 23220

A·H·ROBINS

CLEAR THE TRACT! ROBITUSSIN®



THERE'S A FORMULATION FOR EVERY COUGHING NEED

All the Robitussins contain glyceryl guaiacolate, the outstanding expectorant agent that greatly increases the output of lower respiratory tract fluid. Increased RTF volume exerts a demulcent effect on the tracheo-bronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise.

For coughs of colds and "flu"
ROBITUSSIN®
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Alcohol, 3.5%

For unproductive allergic coughs
ROBITUSSIN® A-C
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Pheniramine maleate . . . . . 7.5 mg.
Codeine phosphate . . . . . 10.0 mg.
(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hour cough control
ROBITUSSIN®-DM
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Dextromethorphan hydrobromide . 15.0 mg.
Alcohol, 1.4%

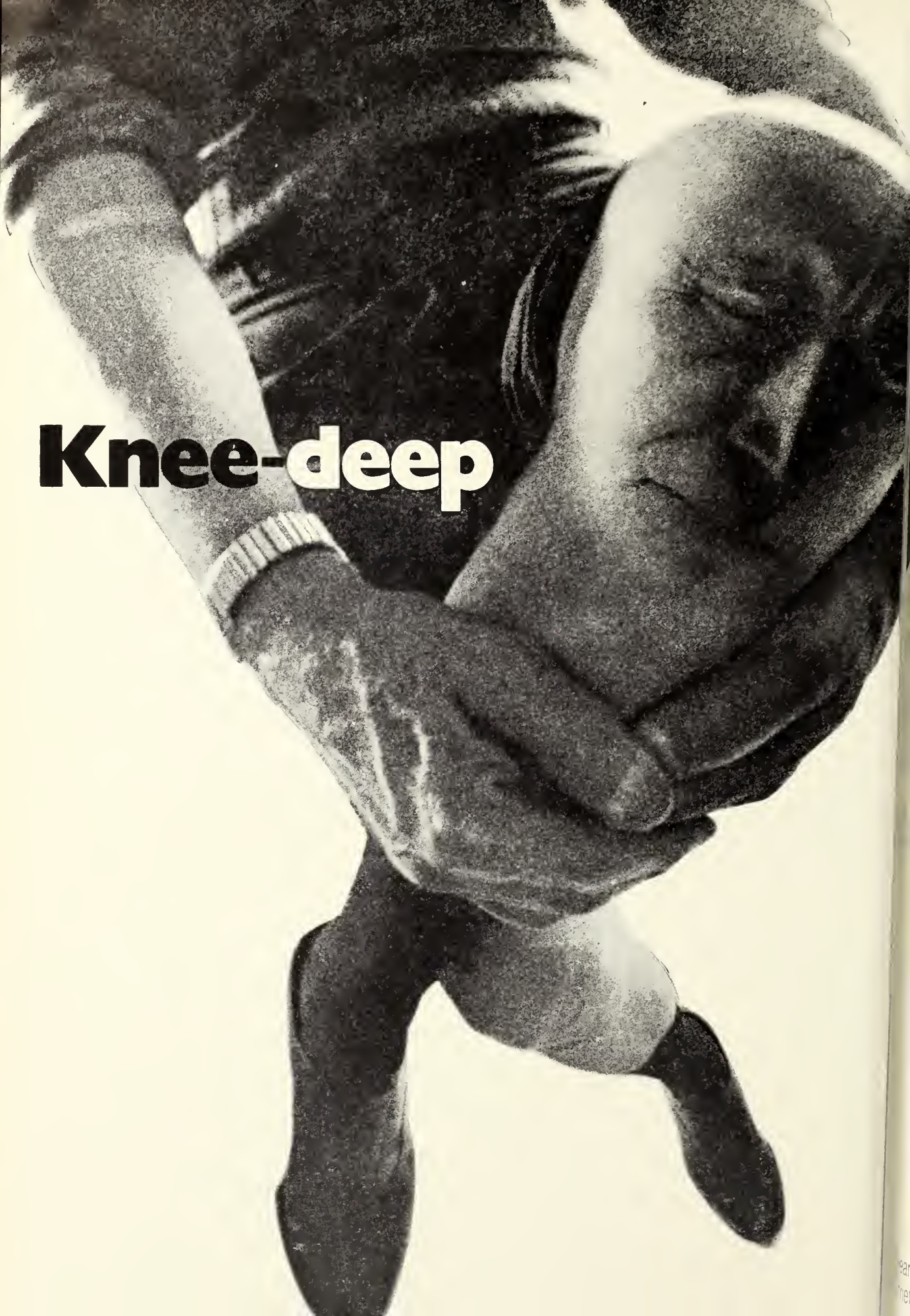
Clears sinuses and nasal stuffiness as it relieves cough
ROBITUSSIN®-PE
Each 5 cc. contains:
Glyceryl guaiacolate . . . . . 100 mg.
Phenylephrine hydrochloride . . . 10.0 mg.
Alcohol, 1.4%

	ROBITUSSIN	ROBITUSSIN A-C	ROBITUSSIN-DM	ROBITUSSIN-PE
EXPECTORANT	●	●	●	●
DEMULCENT	●	●	●	●
COUGH SUPPRESSANT		●	●	
ANTIHISTAMINE		●		
LONG-ACTING (6-8 HOURS)			●	
NASAL, SINUS DECONGESTANT				●

PHOTO BY VICTOR HAND

A. H. Robins Company, Richmond, Va. 23220

A·H·ROBINS


Knee-deep

in osteoarthritic pain

If aspirin doesn't help, move in with Tandearil.

The trial period is brief: 1 week. Try one tablet q.i.d. at first. Tandearil usually starts working within 3 to 4 days. When response occurs, as little as 1 or 2 tablets daily may hold back pain and stiffness, and increase joint motion.

On the next page is a summary of adverse reactions, contraindications, warning and precautions.

Tandearil.
It can help get his mind off his knee.

Please review full Prescribing Information carefully before prescribing.

For osteoarthritic knees, spines, shoulders, hips, etc.:

Tandearil®
oxyphenbutazone

Tandearil, oxyphenbutazone:
For brief summary see next page.

Geigy

TA-6006



Tandearil®
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently

Warning: This drug is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy, and in patients with thyroid disease.

Precautions. Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily.

In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

(B)R-46-800-A

For complete details, please see full Prescribing Information.

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502

HIGHLAND HOSPITAL

Asheville, North Carolina

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.
Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions
or
Area Code 704 253-2761
Charles W. Neville, Jr., M.D.
Assistant Professor of Psychiatry and Medical Director





"Upper respiratory infection! I thought everything was a 'virus' these days?"

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® in two different tablet formulations.

And let you control the dosage.

With Novahistine LP tablets and Novahistine Singlet™ tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever.

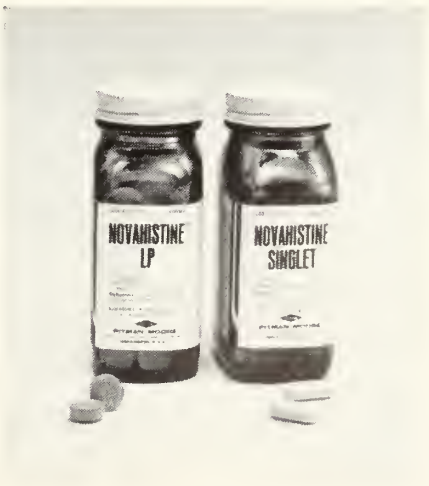
Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

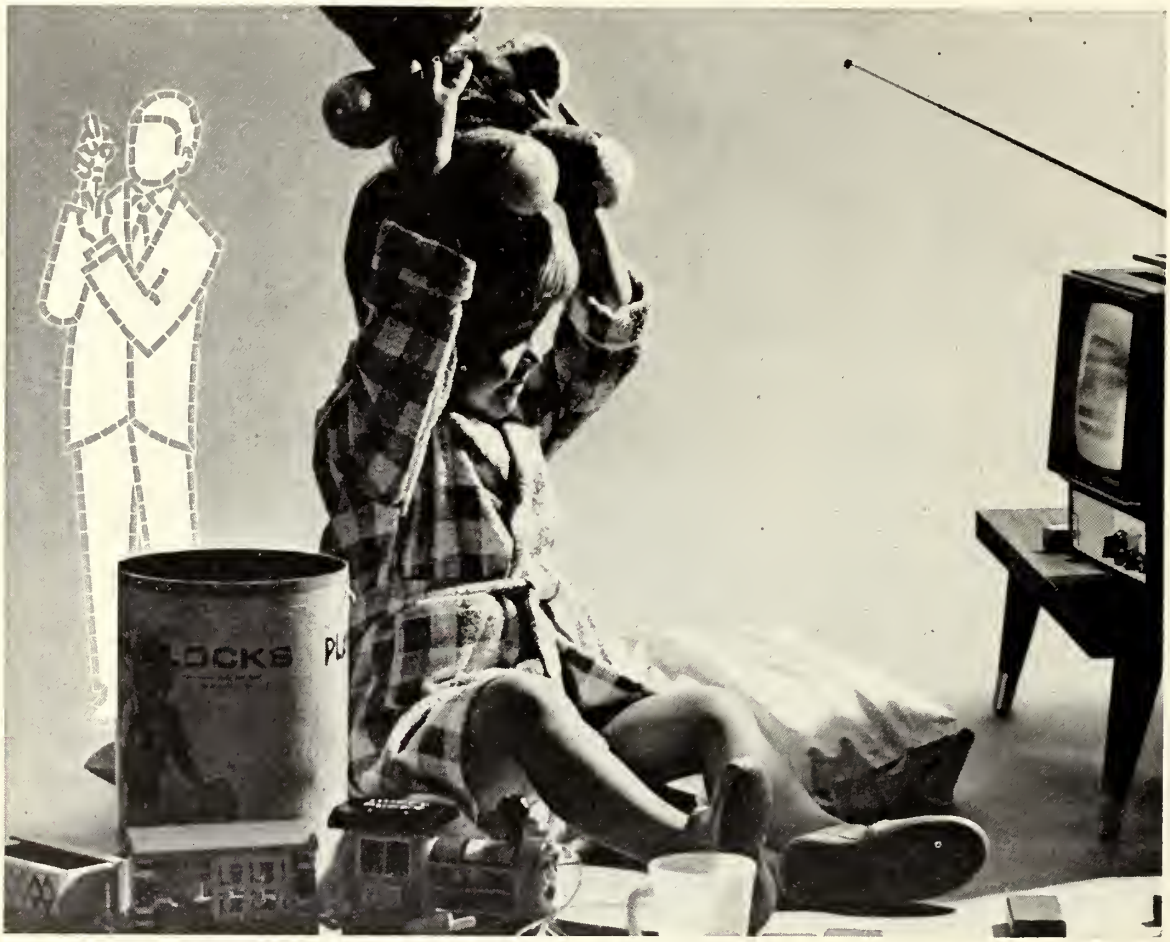
Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.

Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg.



DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS

It's almost as if you were there to give an injection of penicillin



dependable oral penicillin therapy V-Cillin K®, Pediatric

Potassium Phenoxymethyl Penicillin

Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K® (Potassium Phenoxymethyl Penicillin Tablets, U.S.P.), 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly), Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567A] 800197

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206

Lilly

ACHROMYCIN® WORKS HERE
TETRACYCLINE



Rand McNally & American Map Co., Inc., New York, No. NY 388

See inside fold for product summary

Effectiveness: ACHROMYCIN Tetracycline is a crystalline broad-spectrum antibiotic which provides effective therapeutic activity against susceptible microorganisms.

Contraindication: History of hypersensitivity to tetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Some patients may develop a photodynamic reaction to natural or artificial sunlight. Those with a history of photosensitivity reactions should avoid direct exposure to sunlight while under treatment. Discontinue drug at first evidence of skin discomfort.

Precautions: Use may result in overgrowth of nonsusceptible organisms. Constant observation is essential. If new infections appear, take appropriate measures. Use of tetracycline during teeth development may cause discoloration of teeth.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity reaction, onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose-related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels have been reported following full therapeutic dosage. This symptom has disappeared rapidly when drug is discontinued. Teeth—dental staining (yellow-brown) in children of mothers given tetracycline during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. Tetracycline may form a stable calcium complex in bone-forming tissue. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: One Gm. per day, in 4 divided doses of 250 mg. each. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

ACHROMYCIN® WORKS HERE
TETRACYCLINE

Actually ACHROMYCIN works wherever the infection is due to an organism your lab cultures have shown to be tetracycline-sensitive. No other tetracycline—or analogue—can assure you of quicker or more effective antibiotic action. After all, isn't that what you want for your patient?

ACHROMYCIN was a pioneer in tetracycline therapy. Seventeen years of experience have shown that when the respiratory system, the genitourinary system, or the skin and soft tissue require treatment for infection probably caused by any of a number of sensitive strains, ACHROMYCIN is a wise choice for therapy while awaiting test results.

Available in 31 useful forms to meet your situational needs.

ACHROMYCIN® V
TETRACYCLINE CAPSULES **The cost differential—inconsequential**

Lederle
LEDERLE LABORATORIES
A Division of
American Cyanamid Company
Pearl River, New York 10965



choose an experienced candidate—
millions of doses prescribed

Benadryl®
(diphenhydramine hydrochloride)

The White band on Pink capsule combination is a registered trademark of Parke, Davis & Company.

Supplied in various dosage forms including Kapseals,® containing 50 mg. of diphenhydramine hydrochloride.

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

47968

No two women are quite alike...





and no other oral contraceptive is quite like Ovulen-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

The progestin is distinctive, and for some women this may mean a different clinical response. The Compack® tablet dispenser is distinctive; its functional simplicity makes it virtually patient-proof. The acceptance of Ovulen-21 is distinctive... together with Ovulen®, it is more often prescribed than any other individual contraceptive product currently available.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see Detailed Product Information.

SEARLE Where "The Pill" Began
G. D. SEARLE & CO., P. O. Box 5110, Chicago, Illinois 60680



"Breathing's a snap again," he said gingerly.
(COMPLIMENTS OF DIMETAPP)

Help clear up that miserable stuffed-up feeling with Dimetapp. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done . . . in a hurry.

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripher vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thromb cytopenia, have been reported on rare occasions. Drowsiness, lassitud nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPAN
RICHMOND, VA. 232

A·H·ROBIN

in sinusitis, colds, U.R.I.

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

up to 10-12 hours clear breathing on one tablet



Dilantin®
(diphenylhydantoin)

PARKE-DAVIS

In untold thousands of epileptic patients... Dilantin has been, and continues to be, the bedrock of therapy.

DILANTIN is useful in the treatment of grand mal epilepsy and certain other convulsive states. Its use will prevent or greatly reduce the incidence and severity of convulsive seizures in a substantial percentage of epileptic patients, without the hypnotic and narcotizing effects of many anticonvulsant drugs.
PRECAUTIONS: Periodic examination of the blood is advisable. Nystagmus in combination with diplopia and ataxia indicates dosage should be reduced. The possibility of toxic effects during pregnancy has not been explored. ADVERSE REACTIONS: Allergic phenomena such as polyarthropathy, fever, skin eruptions, and acute generalized morbilliform eruptions with or without fever. Rarely, dermatitis goes on to exfoliation with hepatitis, and further dosage is contraindicated. Gingival hypertrophy, hirsutism, and excessive motor activity are occasionally encountered. During initial treatment, side effects may include gastric distress, nausea, weight loss, nervousness, sleeplessness, feeling of unsteadiness. Macrocytosis, megaloblastic anemia, leukopenia, granulocytopenia, thrombocytopenia, pancytopenia, agranulocytosis, and aplastic anemia have been reported. Nystagmus, lymphadenopathy, lupus erythematosus, erythema multiforme (Stevens-Johnson syndrome), and a syndrome resembling infectious mononucleosis with jaundice have occurred.
DILANTIN is supplied in several forms including Kapseals® containing 0.1 Gm. and 0.03 Gm. diphenylhydantoin sodium.
Parke, Davis & Company, Detroit, Michigan 48232

The color combinations of the banded capsules are Parke-Davis trademarks. The orange-banded white capsule identifies Parke-Davis 0.1 Gm. diphenylhydantoin sodium; the pink-banded white capsule 0.03 Gm. diphenylhydantoin sodium.

PARKE-DAVIS 015R67





Geigy



Regroton®

chlorthalidone 50 mg.
reserpine 0.25 mg.

One Regroton tablet a day usually helps you and your patient bring high blood pressure down and keep it down.

Regroton produces a smooth, long-acting effect that usually reduces both systolic and diastolic pressures. At the same time it often acts to allay anxiety and nervous tension associated with hypertension.

Although Regroton is generally well tolerated, adverse reactions may occur. This drug is contraindicated in mental depression, demonstrated hypersensitivity, and most cases of severe renal or hepatic diseases. For a complete list of side effects, please see the Prescribing Information summarized on the following page.

Regroton®

chlorthalidone 50 mg.
reserpine 0.25 mg.



One Regroton tablet a day
usually helps you and your patient
bring high blood pressure down
and keep it down.

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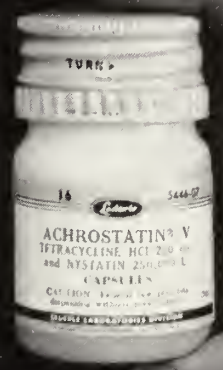
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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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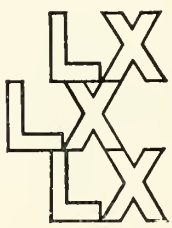
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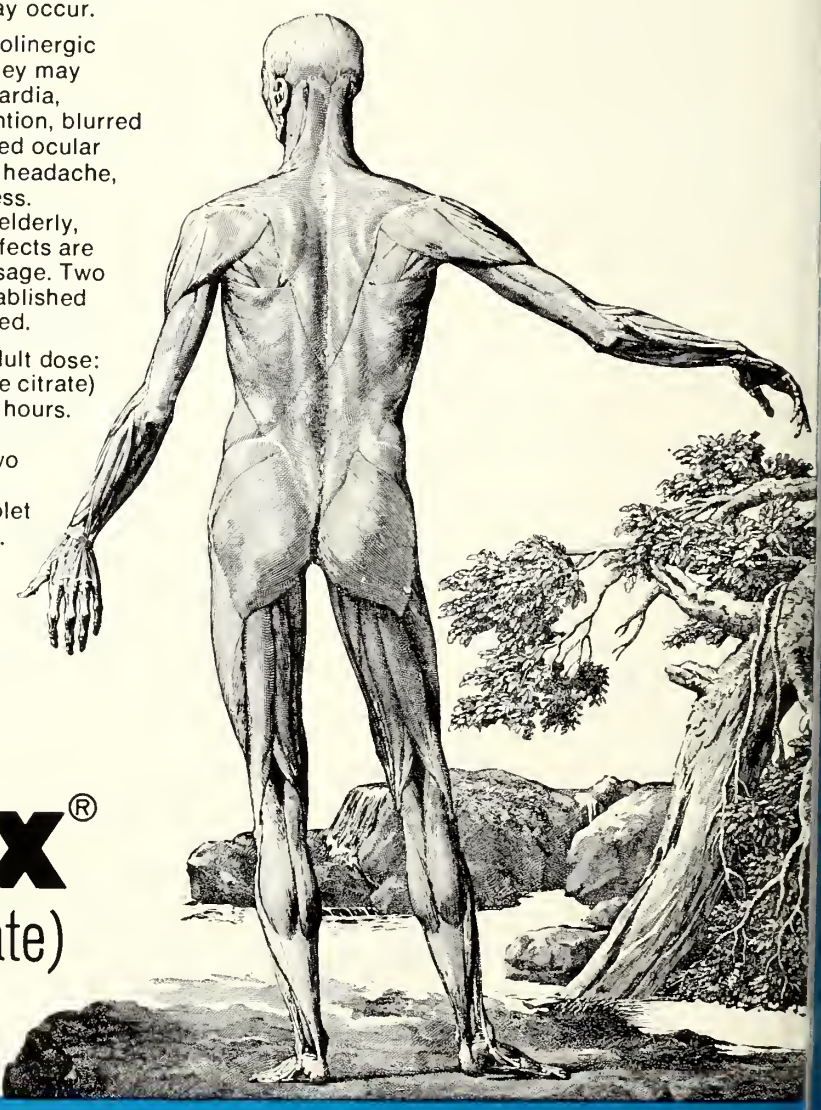
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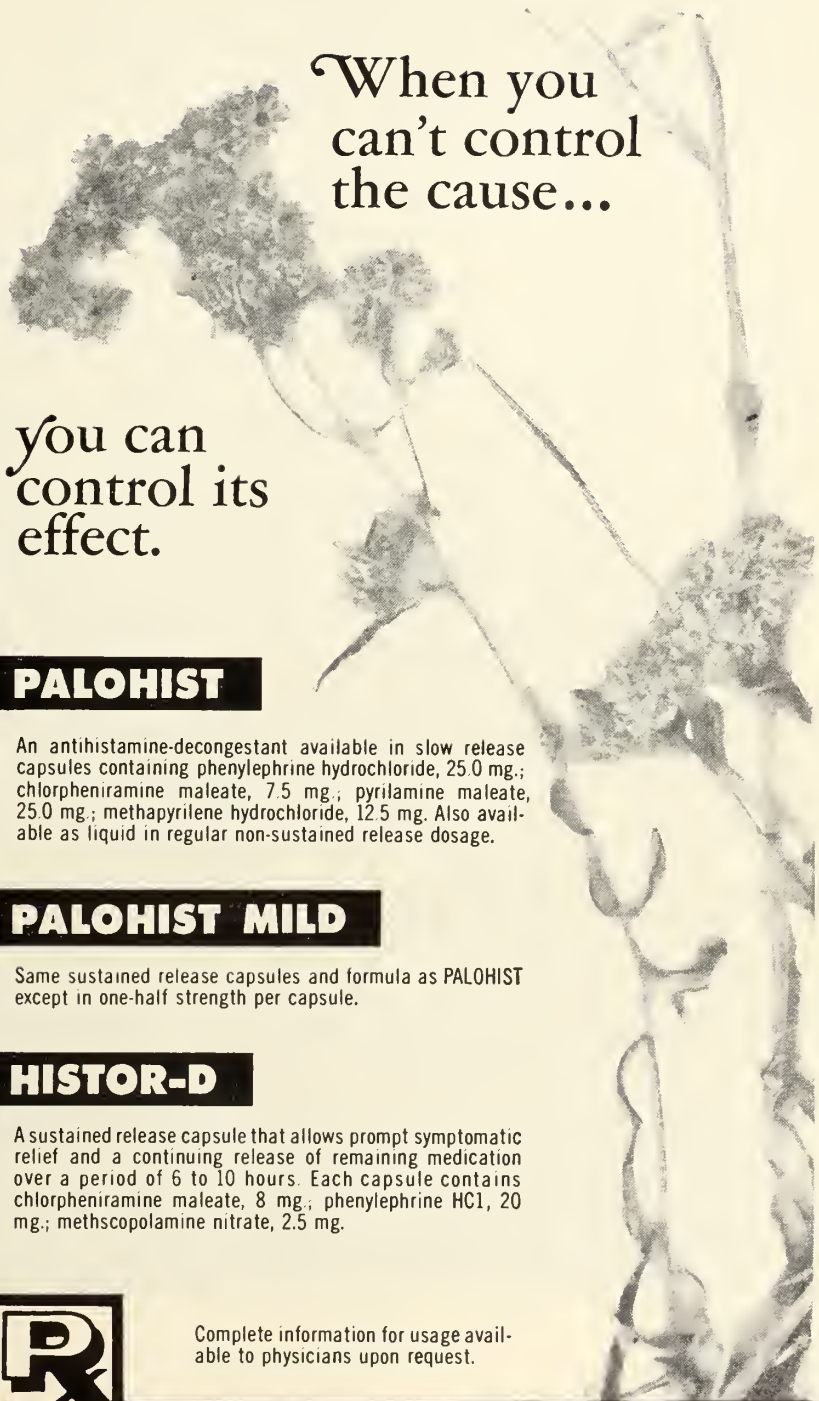
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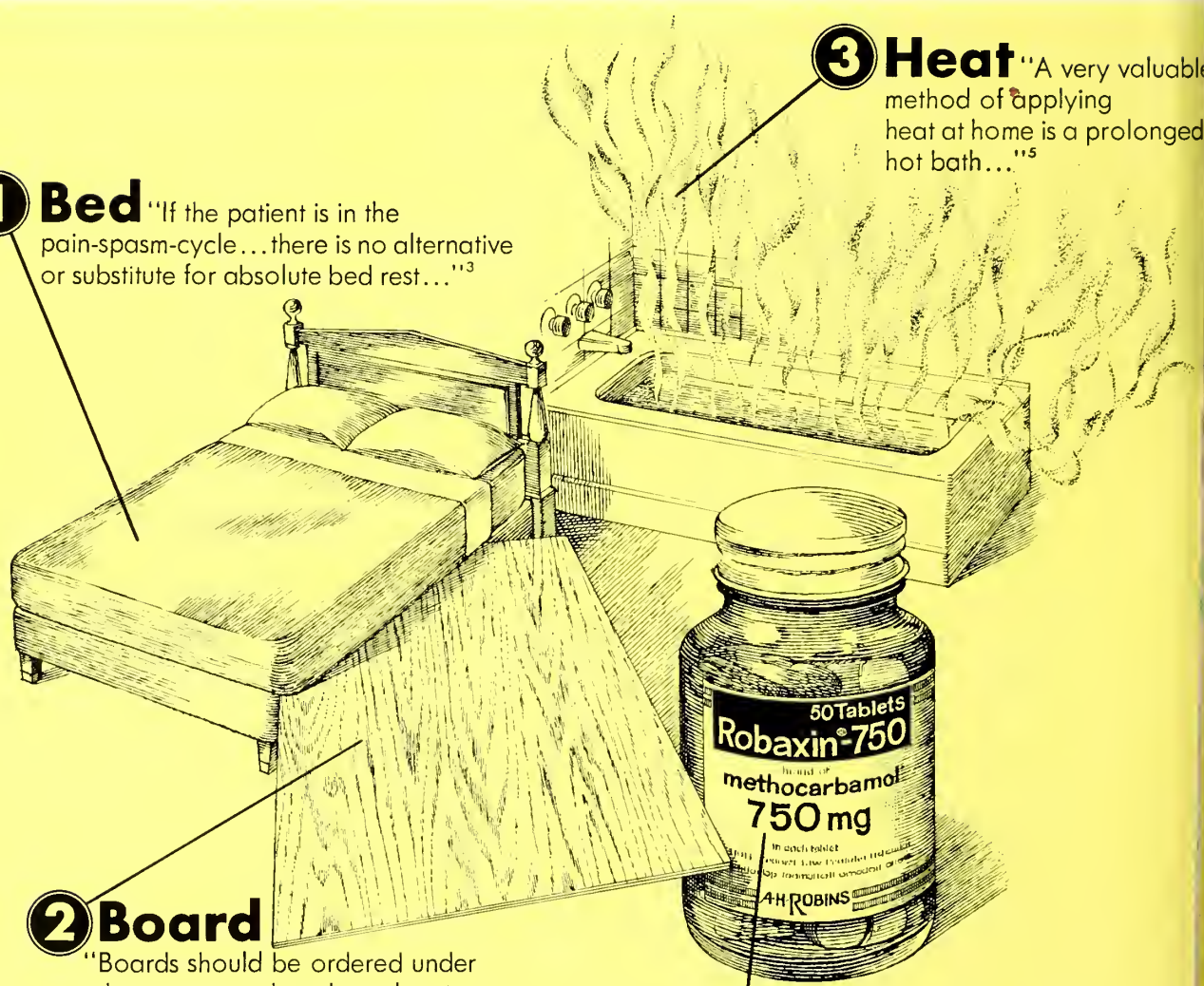
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up to 10-12 hours clear breathing on one tablet



LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:



1 Bed "If the patient is in the pain-spasm-cycle...there is no alternative or substitute for absolute bed rest..."[3]

2 Board "Boards should be ordered under the mattress...these boards act by immobilizing the spine..."[4]

3 Heat "A very valuable method of applying heat at home is a prolonged hot bath..."[5]

4 Robaxin®-750 (methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "...without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear on reduced dosage. Hypersensitivity reactions develop infrequently. See product literature for further details. **Also available:** Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.)

References: (1). Godfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cazen, L.: South Dakota J. Med. 18:26, 1965. (5). Soto-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteapath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New York J. Med. 62:1985, 1962.

A·H·ROBINS A. H. ROBINS COMPANY RICHMOND, VIRGINIA 23220

In the complex picture of moderate to severe anxiety...



here is a new reason or prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

long recognized for its usefulness in the eatment of moderate to severe anxiety, Mellaril is now also known to be effective gainst mixed anxiety-depression.

often the symptoms of anxiety states are fficult to sort out—even with the most careful robing. The patient may manifest symptoms of gitation, restlessness, insomnia, somatic mplaints. But what of the depression that may e mixed in the total picture? It is reassuring know that Mellaril may be prescribed—with rong possibilities of success—when there is xiety alone or a mixture of anxiety nd depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl)
25 mg. t.i.d.

for moderate to severe anxiety and mixed anxiety-depression

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J. 68-170



Louie lost weeks with acute shoulder bursitis. That's a p
of pain, stiffness and tenderness...and also a lot of fi
It might have been different with **Butazolidin®** al

100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate

If it doesn't work in a week, forge

But please don't forget this:

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alka formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



Dosage in Painful Shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

(8) 46-070-8

For complete details, please see full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

Butazolidin® alka Geigy

Capsules
100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate

BU-6210

The Divorced Depressive: "Forty Forgotten

"Had a large wedding."
"Had a fine home and family."



.Forlorn"

ıd a divorce."
ı a real loser,
d so are
e kids."



The loss of marital compatibility results in nearly 500,000 U.S. divorces each year.

Depression characterized by untold guilt feelings, grief and loneliness may follow.

When you diagnose depression, Tofrānil may be indicated for relief.

As maintenance therapy during the active phase of depression, Tofrānil can often help prevent relapse.

The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated. In patients with cardiovascular disease, thyroid disorders, increased intraocular pressure; in those receiving anticholinergics (including antiparkinsonism agents), thyroid medication or antihypertensive adrenergic neuron-blocking agents; and in those in their first trimester of pregnancy—the special precautions listed in the Prescribing Information should be carefully observed.

Toxic reactions severe enough to require discontinuation of Tofrānil are uncommon. However, for complete details, please refer to the complete Prescribing Information.

Turn page for brief summary of Prescribing Information.

in depression

Tofrānil® imipramine hydrochloride
Geigy

in depression





Tofrānil® Geigy

imipramine
hydrochloride

Tofrānil®, imipramine hydrochloride
Indications: Tofrānil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, it should not be used during the first trimester of pregnancy. Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy. Because of its anticholinergic effect, caution should be observed in prescribing the drug for patients with increased intraocular pressure.
In rare instances, transient cardiac arrhythmias have occurred in hyperthyroid patients and in patients receiving thyroid medication when this compound was added to the regimen. Imipramine may block the pharmacologic activity of guanethidine and other related adrenergic neuron-blocking agents.
The drug is not recommended at the present time in patients under 12 years of age.
Adverse Reactions: Dryness of the mouth, tachycardia, constipation, disturbances of accommodation, sweating, dizziness, weight gain, urinary frequency or retention, nausea and vomiting, peripheral neuritis, mild parkinson-like syndrome, tremors, rare cases of falling in elderly patients, confusional states (with such symptoms as hallucinations and disorientation), activation of psychosis in schizophrenics and agitation (including hypomanic and manic episodes) which may require dosage reduction and/or addition of a tranquilizer or temporary discontinuation of the drug, epileptiform seizures, orthostatic hypotension and substantial blood pressure fall in hypertensive patients, purpura, transient jaundice, bone marrow depression including agranulocytosis, sensitization and skin rash including photosensitization, eosinophilia, and mild withdrawal symptoms on sudden discontinuation after prolonged treatment with high doses. Occasional hormonal effects (impotence, decreased libido, and estrogenic effects) may be observed. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those using anticholinergic agents (including antiparkinsonism drugs).
Outpatient Adult Dosage: Initially, 75 mg. daily, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
(B)R-46-850-C

For complete details, please refer to the full Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

TO-6757



Photo professionally posed.

No injection after all!

This penicillin produces high, fast levels—orally.

Pen•Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

Indications: Infections susceptible to oral penicillin G: propnylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN•VEE® K**

(potassium phenoxymethyl penicillin) Wyeth®

The Bettmann Archive



Just one tablet at bedtime • Prevents painful night leg cramps • Permits restful sleep

How many of your patients stamp their feet at night and lose sleep because of painful leg cramps? Unless prompted, they usually fail to report this distressing condition and suffer needlessly.

One tablet of QUINAMM at bedtime usually controls distressing night cramps and permits restful sleep with the initial dose.

Prescribing information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Side Effects/Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

ACHROMYCIN® V
TETRACYCLINE

Contraindications: Hypersensitivity to tetracycline.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Nonsusceptible organisms may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Side Effects: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

LEDERLE LABORATORIES
A Division of
American Cyanamid Company
Pearl River, New York 10965

359-8

Suspected tetracycline-sensitive infection?

While waiting for the results of the sensitivity test, start the therapy likely to succeed...

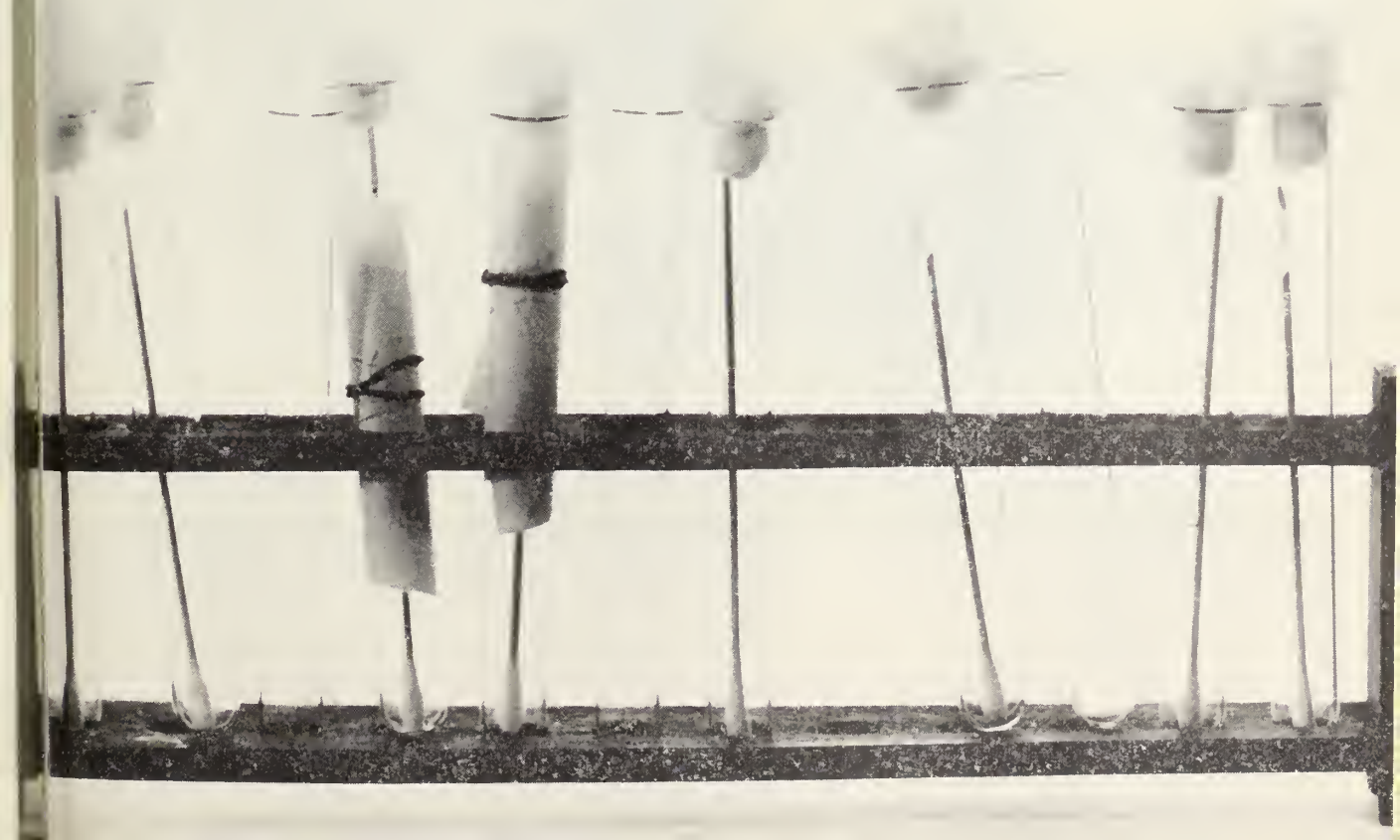
Although of course it can't replace routine sensitivity testing, your prescription for ACHROMYCIN® V, in a way, provides the ultimate test of therapy under rigorous *in vivo* conditions.

Because ACHROMYCIN® V is effective in treating so many common infections—caused by strains of tetracycline-sensitive organisms—doesn't *stat* dosage of this time-tested antibiotic make good sense?

←Prescribing Information

ACHROMYCIN® V
TETRACYCLINE
Lederle

The price differential is inconsequential.





Nothing else I've tried seems to work, so I decided to give you a crack at it.

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® tablets in two different formulations.

And let you control the dosage.

With Novahistine LP tablets and Novahistine Singlet tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever.

Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.

Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg.



DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS



"Now that your acne is clearing up nicely, it might be a good idea if you started losing some weight."

Get them while they're easily reversible.

Obesity doesn't happen suddenly. This insidious process has its beginning—and the chances of reversing it are better—during the *first 10 to 15 pounds of weight gain.* When a new dietary pattern must be established, consider the adjunctive use of BAMADEX SEQUELS. Combining the proven *anorexigenic* action of d-amphetamine with the *tranquilizing* effect of meprobamate, BAMADEX SEQUELS controls appetite throughout the day, usually with a single capsule daily.

Contraindications: Dextro-amphetamine sulfate: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Bamadex® Sequels®

Dextro-Amphetamine Sulfate (15 mg.) with Meprobamate (300 mg.) Sustained Release Capsules

Lederle

LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York

407-8

Dilantin®
(diphenylhydantoin)

PARKE-DAVIS

In untold thousands of epileptic patients... Dilantin has been, and continues to be, the bedrock of therapy.

DILANTIN is useful in the treatment of grand mal epilepsy and certain other convulsive states. Its use will prevent or greatly reduce the incidence and severity of convulsive seizures in a substantial percentage of epileptic patients, without the hypnotic and narcotizing effects of many anticonvulsant drugs.
PRECAUTIONS: Periodic examination of the blood is advisable. Nystagmus in combination with diplopia and ataxia indicates dosage should be reduced. The possibility of toxic effects during pregnancy has not been explored. ADVERSE REACTIONS: Allergic phenomena such as polyarthropathy, fever, skin eruptions, and acute generalized morbilliform eruptions with or without fever. Rarely, dermatitis goes on to exfoliation with hepatitis, and further dosage is contraindicated. Gingival hypertrophy, hirsutism, and excessive motor activity are occasionally encountered. During initial treatment, side effects may include gastric distress, nausea, weight loss, nervousness, sleeplessness, feeling of unsteadiness. Macrocytosis, megaloblastic anemia, leukopenia, granulocytopenia, thrombocytopenia, pancytopenia, agranulocytosis, and aplastic anemia have been reported. Nystagmus, lymphadenopathy, lupus erythematosus, erythema multiforme (Stevens-Johnson syndrome), and a syndrome resembling infectious mononucleosis with jaundice have occurred.
DILANTIN is supplied in several forms including Kapseals® containing 0.1 Gm. and 0.03 Gm. diphenylhydantoin sodium.
Parke, Davis & Company, Detroit, Michigan 48232

The color combinations of the banded capsules are Parke-Davis trademarks. The orange-banded white capsule identifies Parke-Davis 0.1 Gm. diphenylhydantoin sodium; the pink-banded white capsule 0.03 Gm. diphenylhydantoin sodium.

PARKE-DAVIS 015R67



the antacid puzzle

In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

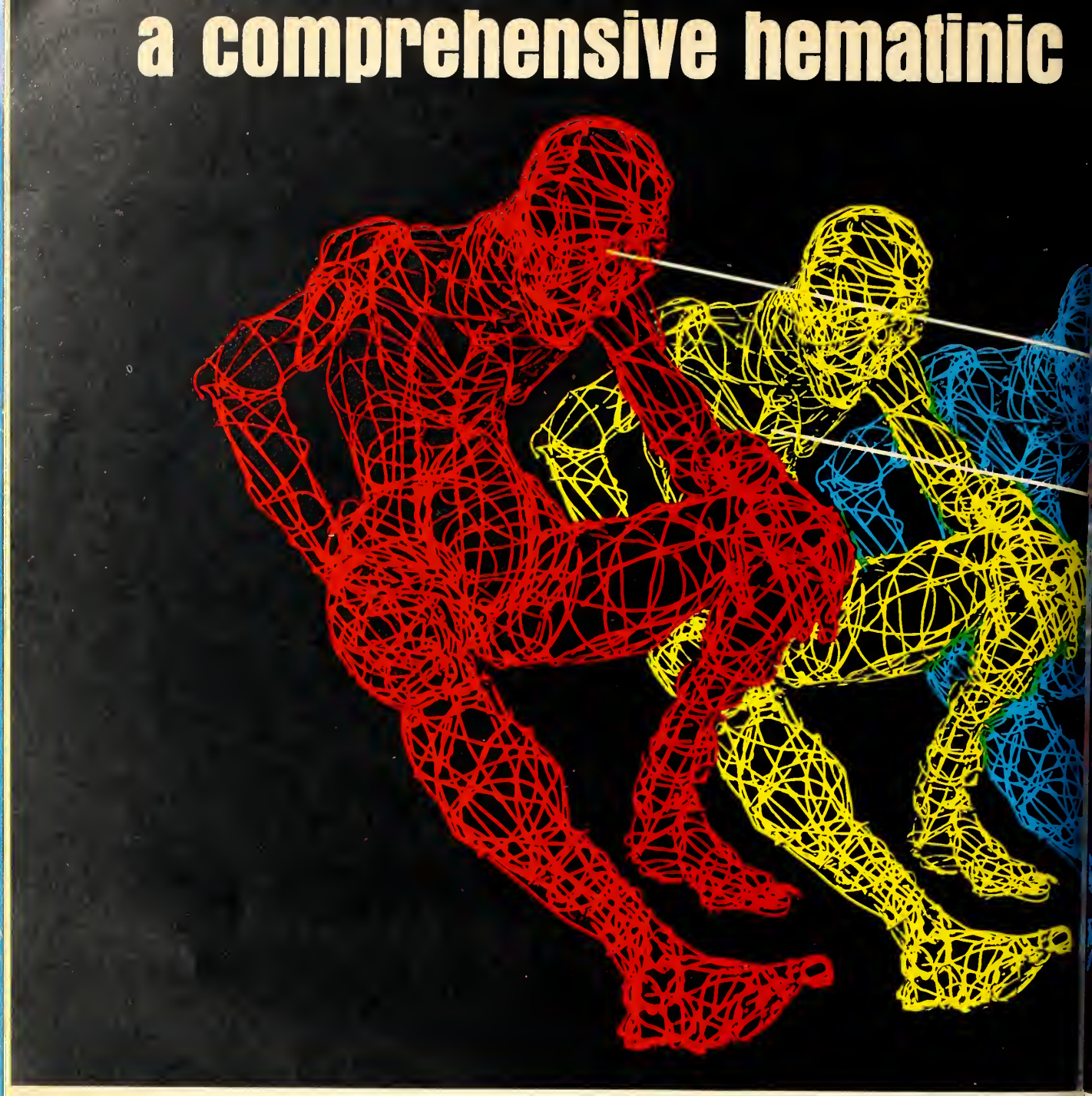
"will this one taste O.K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

a comprehensive hematinic



)escription: Each Pulvule® contains—

;pecial Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150	mg.
:obalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5	mcg.
ron, Elemental (as Ferrous Fumarate)	110	mg.
scorbic Acid (Vitamin C)	75	mg.
olic Acid	1	mg.

ndications: Trinsicon® (hematinic concentrate with intrinsic fac-)r, Lilly) is a multifactor preparation effective in the treatment f anemias that respond to oral hematinics, including pernicious nemia and other megaloblastic anemias and also iron-deficiency nemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without adequat vitamin B_{12} therapy may result in hematologic remission but neu rological progression. Adequate doses of vitamin B_{12} (parenteral or oral with potent intrinsic factor as in Trinsicon® [hematinic concentrate with intrinsic factor, Lilly]) usually prevent, halt, o improve the neurological changes.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentia tion of absorption of physiological doses of vitamin B_{12}. If resist ance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary. No single regi men fits all cases, and the status of the patient observed i follow-up is the final criterion for adequacy of therapy. Periodi



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

cl ical and laboratory studies are considered essential and are re ommended.

A erse Reactions: In rare instances, iron in therapeutic doses p duces gastro-intestinal reactions, such as diarrhea or consti- pa on. Reducing the dose and administering it with meals will m imize these effects.

extremely rare instances, skin rash suggesting allergy has fo owed oral administration of liver-stomach material. Instances of pparent allergic sensitization have also been reported after or administration of folic acid.

D age: One Pulvule twice a day. (Two Pulvules daily produce a st dard response in the average uncomplicated case of perni- ci s anemia.)

H Supplied: Pulvules Trinsicon® (hematinic concentrate with in nsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

801668

Lilly



"The inconvenience of a cold"

For a cold, NTz® Nasal Spray provides rapid relief of nasal symptoms. Relief starts with the first spray which opens the inferior part of the common meatus. A second spray, a few minutes later, will shrink the turbinates to help provide sinus drainage and ventilation. Dosage may be repeated every three or four hours as needed, for temporary relief of symptoms. NTz is well tolerated but overdosage should be avoided.

As a sinusitis deterrent, NTz Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

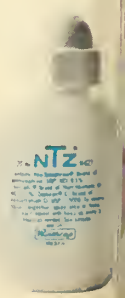
Supplied: NTz Nasal Spray, plastic squeeze bottles of 20 ml.; NTz Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTz is more than a simple vasoconstrictor. It contains

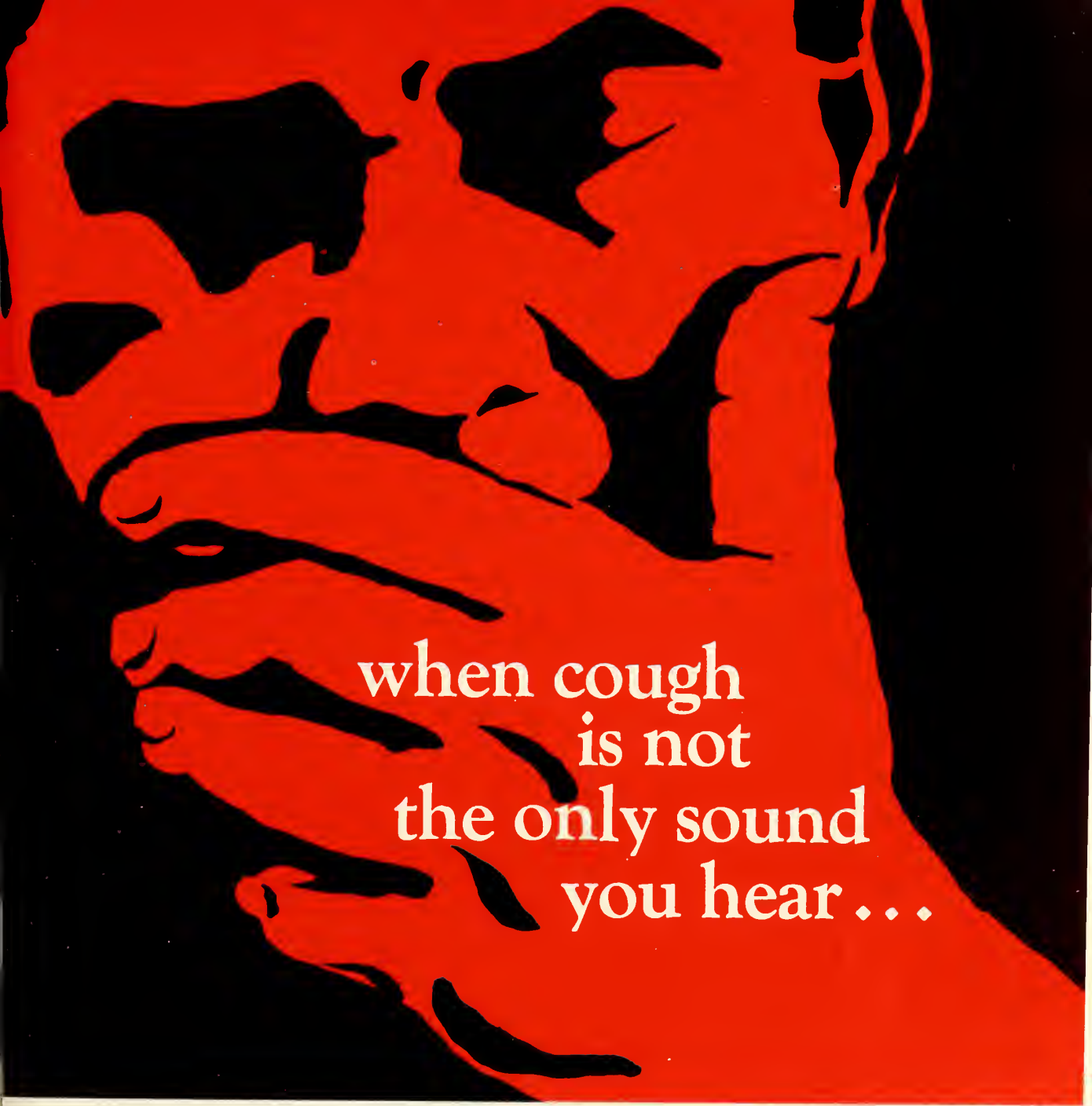
Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.



Winthrop Laboratories, New York, N.Y. 10016 Winthrop



OMNI-TUSS® b.i.d.

. . . **because** OMNI-TUSS is indicated for cough associated with upper respiratory tract infections, bronchitis, bronchiectasis, bronchial asthma, emphysema, sinusitis and rhinitis, hay fever, or other allergic conditions. Any of these conditions may exhibit the general symptom syndrome—coughing, wheezing, bronchospasm, and tenacious mucus—which may benefit from the antitussive, bronchodilative, antihistaminic, and expectorant action of Omni-Tuss.

The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

Strasenburgh
Strasenburgh Laboratories Division
Wallace & Tiernan Inc., Rochester, N.Y.

When it's more than a bad cold



your patient can feel better while she's getting better

Achrocidin®

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

In tetracycline-sensitive bacterial infection complicating respiratory allergy, ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

327-8

Tuberculosis? Influenza?
Pneumonia? Leukemia?
Hodgkin's Disease? Syphilis?
Systemic Fungal Diseases?
Chronic Chest Diseases?
or

HISTO?

(Histoplasmosis—"The Masquerader")



A new aid in differential diagnosis

HISTOPLASMIN, TINE TEST
(Rosenthal)

The LEDERTINE™ Applicator with the Blue Handle

Precautions—Nonspecific reactions are rare, but may occur. Vesiculation, ulceration or necrosis may occur at test site in highly sensitive persons. The test should be used with caution in patients known to be allergic to acacia, or to thimerosal (or other mercurial compounds).

Lederle

Ask your representative for details or write Medical Advisory Dept., Lederle Laboratories, Pearl River, New York 10965. 406-8



Robitussin-DM Cough Calmers

Each Cough Calmer™ contains the same active ingredients as a half-teaspoonful of Robitussin-DM®. Glyceryl guaiacolate, 50 mg.; Dextromethorphan hydrobromide, 7.5 mg. A. H. Robins Company, Richmond, Virginia 23220

A·H·ROBINS

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

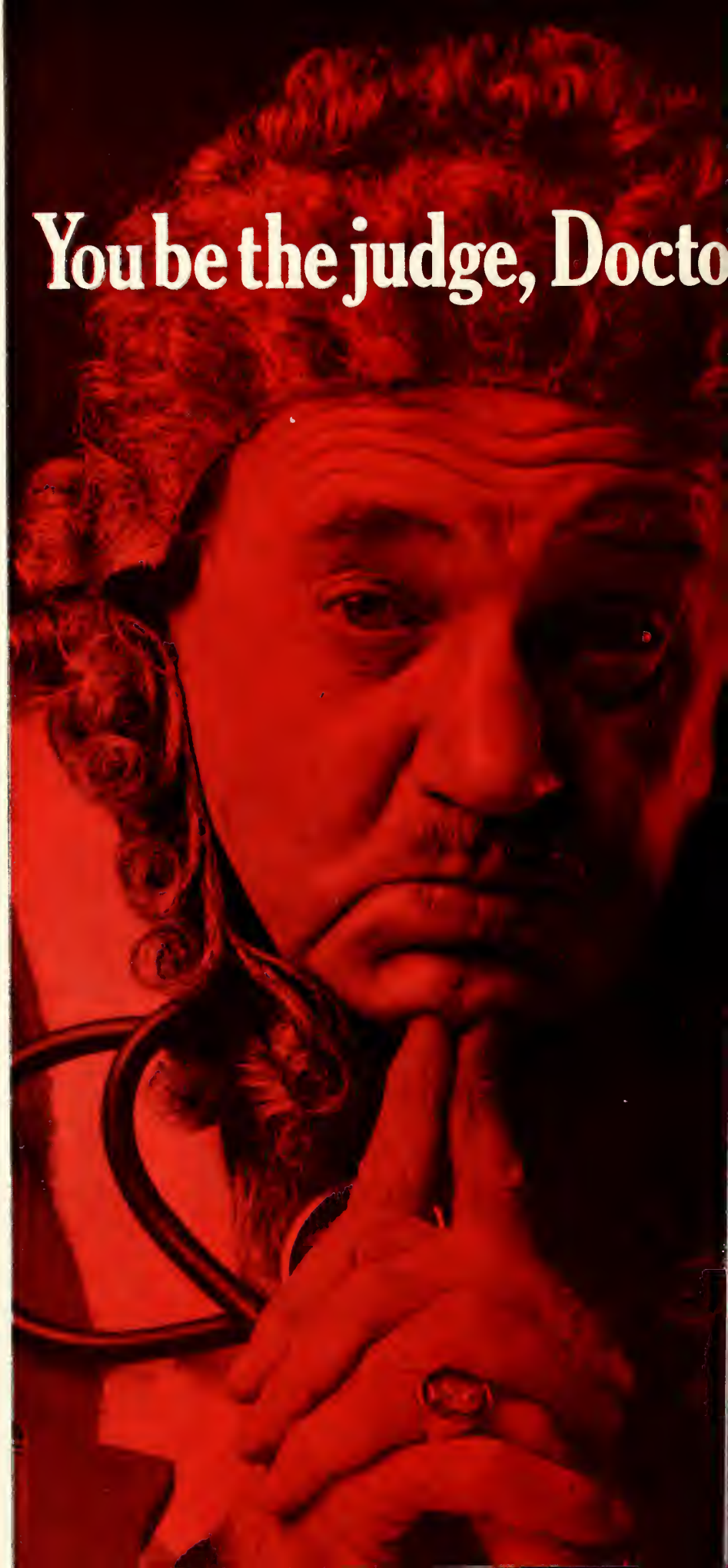
Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl.



Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

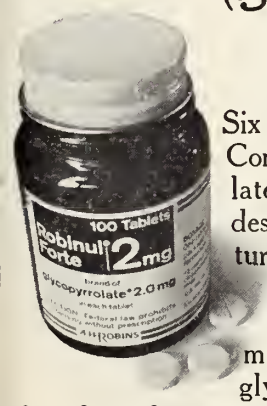
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.); Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

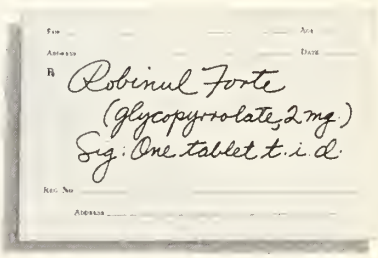
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) found good acceptance among numerous physicians, many others just didn't seem to want to give it a try, probably because the anticholinergic they were already using was giving acceptable results.

However, we believe you'll agree there's always room for a better anticholinergic. This is why we're asking you to give Robinul Forte a fair trial. Robinul Forte exerts a highly specific antisecretory action and marked inhibitory effect on intestinal tone. We're convinced you'll agree that this is indeed an outstanding drug when you observe its outstanding suppression of ulcer symptoms. Furthermore, it is unique in that it reduces intestinal tone, yet has little or no effect on peristalsis. In addition, the incidence of the more bothersome peripheral side effects is low.

No longer does the physician have to look for extreme dry mouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

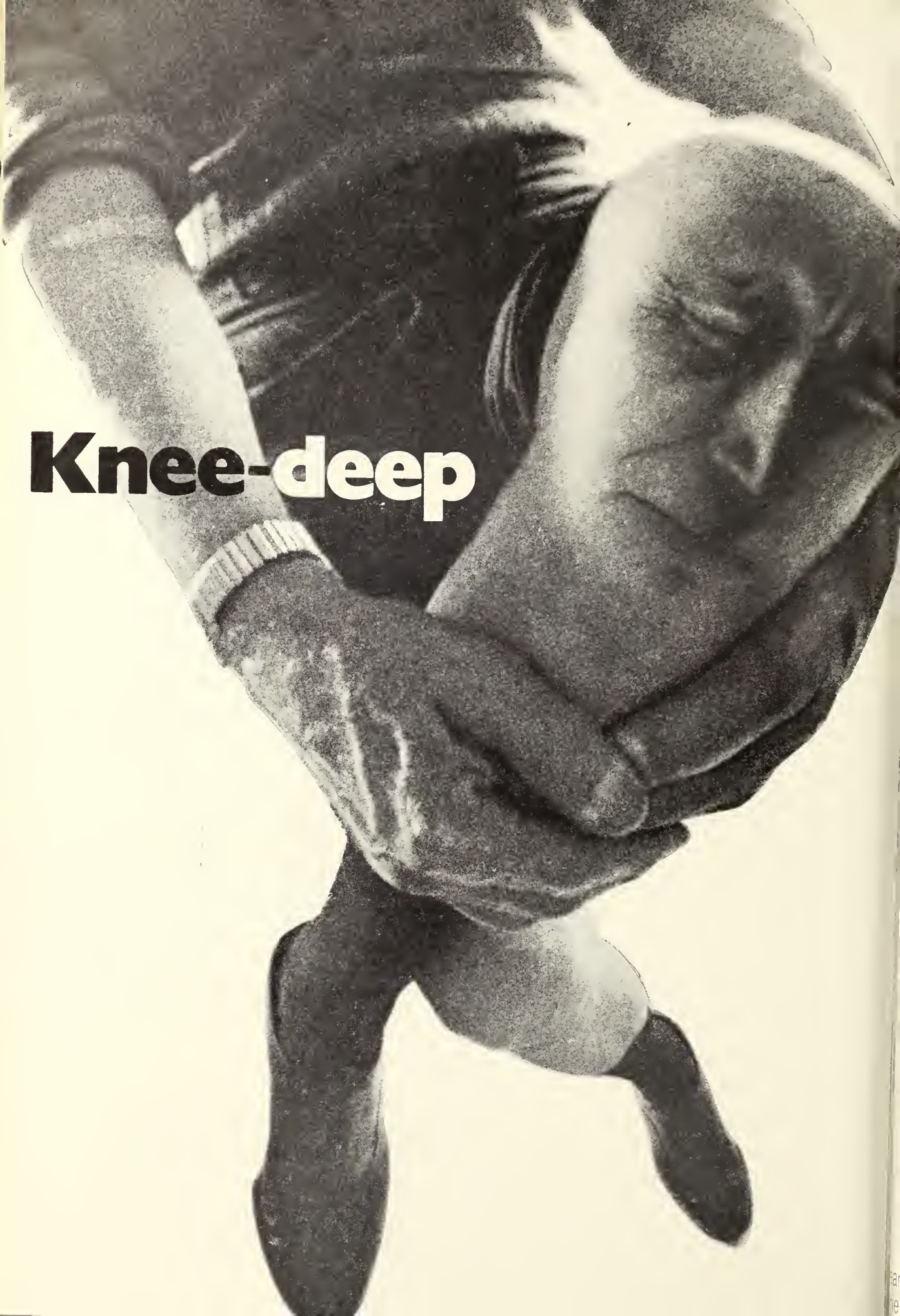
Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.


Knee-deep

n osteoarthritic pain

If aspirin doesn't help, move in Tandearil.

The trial period is brief: 1 week. ɔne tablet q.i.d. at first. Tandearil lly starts working within 3 to 4 days. n response occurs, as little as 1 or lets daily may hold back pain and ess, and increase joint motion.

On the next page is a summary lverse reactions, contraindications, ning and precautions.

Tandearil.
It can help get his mind off his knee.

Please review full Prescribing Information carefully before prescribing.

For osteoarthritic knees, spines, shoulders, hips, etc.:

Tandearil®
oxyphenbutazone

earil, oxyphenbutazone:
rief summary see next page.

Geigy

TA-6006



Tandearil®
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: This drug is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy, and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily.

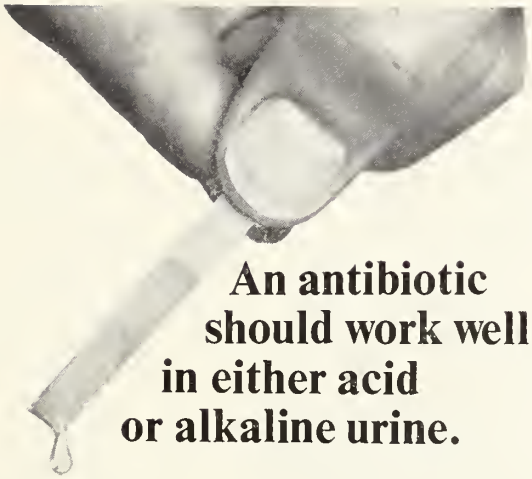
In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

(B)R-46-800-A

For complete details, please see full Prescribing Information.

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502



An antibiotic should work well in either acid or alkaline urine.

It isn't always necessary to adjust urinary pH in treating G.U. infections.

Not when the causative organism is a strain sensitive to DECLOMYCIN® Demethylchlortetracycline, as is often the case.

DECLOMYCIN remains stable and active in either acid or alkaline urine. So there's no need to acidify the urine to keep the antibiotic at work.

Why match the urine to the antibiotic...when you can match the antibiotic to the urine...by prescribing DECLOMYCIN. A b.i.d. dosage makes therapy convenient for your patient.

Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

Capsules: 150 mg; Tablets: film coated – 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.

355-8

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

It's almost as if you were there to give an injection of penicillin



V-Cillin K®, Pediatric dependable oral penicillin therapy

Potassium Phenoxymethyl Penicillin

Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K® (Potassium Phenoxymethyl Penicillin Tablets, U.S.P.), 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly), Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567A] 800198

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206

Lilly

The Journal
of the
South Carolina Medical Association

VOLUME 64 NOVEMBER, 1968 NUMBER 11

A VIEW OF HEALTH SERVICES

Charleston County Health Services As Viewed by the Medically Indigent Negro

B. W. DEAS, JR.**
W. C. MILLER, M.D.†
J. F. FINKLEA, M.D.‡

Health services to the medically indigent have been increasingly criticized during the last few years and no doubt our system for the delivery of health care must be improved. Nevertheless, there has been little or no information on the thoughts of the medically indigent of South Carolina about the health care facilities which they attend. This report is intended to view these services through the comments of 150 indigent Negro families.

Materials

Families selected for interview resided in two low-income, predominantly Negro areas of Charleston County. Ninety-six families lived in urban Charleston Heights, while 54 families lived on rural Edisto Island. In each area a community leader helped the interviewer gain access to the sample families and win their confidence.

Interviews were conducted in an informal conversational manner to encourage a free exchange of ideas but were structured so that specific questions could be answered. All interviews were conducted by one of the authors, who is himself a Negro. Responsible individuals from each of the facilities serving the Charleston County medically indigent helped structure the interview content and were given the results of the survey.

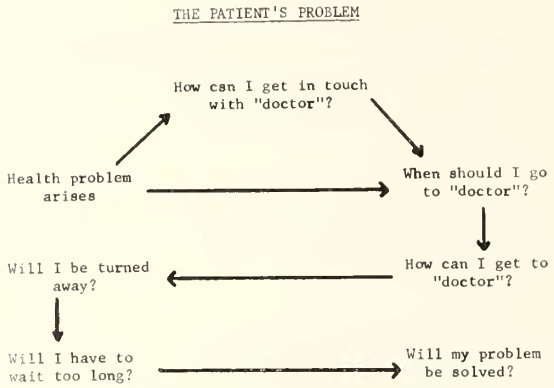
Results and Discussion

A health problem is approached by the indigent consumer in a manner which is not usually considered by physicians. Someone first has to recognize that a health problem exists. Then the patient must either communicate remotely with a health facility or decide to seek care in person. Transportation, acceptance of the patient by health facility, waiting time, and outcome of therapy are other aspects that enter the patient's thinking. This process is presented in figure one where the word "doctor" may represent a physician or a health care facility.

Perception of illness is not difficult when a family member has an acute obvious injury such as a compound fracture of the femur or a large laceration, but illness perception has many subtleties which extend across all patients, including the indigent. In fact, illness perception per se has been the subject of many

*This work was sponsored by the Office of Economic Opportunity through a Resource Development Internship Project administered by the Southern Regional Education Board.
**Second year medical student, Medical College of South Carolina, Charleston, South Carolina.
†Associate Professor of Psychiatry, Medical College of South Carolina, Charleston, South Carolina.
‡Associate Professor of Preventive Medicine and Pediatrics, Medical College of South Carolina, Charleston, South Carolina.

studies. In this survey, indigents were asked about two common health problems, viz. chronic skin sores and intestinal parasites, which physicians generally regard



as both preventable and readily amenable to therapy. Sixty percent of indigent families had noted one or the other of these conditions but only one-half recognized them as health problems and less than one-tenth sought medical care. The foregoing examples are only two of many illnesses that are perceived in completely different ways by the physician and the patient.

Table 1

Question

Do you worry about getting in touch with a doctor?

	Urban %	Rural %
Never worry	77.8	31.3
Seldom worry	6.3	0
Often worry	11.1	68.8
Not ascertained	4.8	0

After recognition, the patient must somehow communicate with a physician or health facility. As seen in Table 1, communications did not seem to be much of a problem in Charleston Heights where telephones are readily at hand; but on rural Edisto Island fully two-thirds of families listed communication with the physician as a major health concern. Families often illustrated this anxiety with stories of poor people with severe injury or illness who could not get help for many hours. Whether or not this fear is well founded is a moot point. Certainly some well publicized, easily acceptable method of communication with emergency services is a need of any community. Perhaps the installation of telephones at a few additional locales on Edisto Island could solve the problem.

Outpatient clinics are scheduled in a way that is convenient and understandable to the health personnel who staff them. However, the indigent consumer often views such clinics as an enigma. As Table 2 shows, neither urban nor rural families have any good idea of when services are available at the various facilities.

Table 2

Question

Do you know schedule of services at facilities?

	Urban %	Rural %
Do not know schedule	71.4	85.4
Find out from friends	0	0
Contact with facility	27.0	14.6
Not ascertained	1.6	0

In general, one just comes ahead to the Medical College Clinic, the Health Department or the Charleston County emergency room hoping that one can get "service". Nine-tenths of the families interviewed would like to have a schedule of clinics made available to some community group such as a church.

The most pressing problem revealed by the survey involved transportation to and from health facilities. As shown in Table 3, urban residents could utilize public transport, usually the city bus, and over one-quarter had cars. On Edisto Island there is no available public transportation and only 6 per cent of the interviewed families own cars. Most rural residents are forced to hire private transportation. Certain residents of this island earn their livelihood by running an un-

Table 3

Question

What transportation do you use to and from health facilities?

	Urban %	Rural %
Public transportation (bus or taxi)	63.5	0
Hire private transportation	0	91.7
Own automobiles	28.6	6.3
Other	7.9	0
Not ascertained	0	2.1

official station wagon service to Charleston. At times the station wagon is quickly filled and rural residents patiently waiting by the roadside are left to try again another day. The trip usually leaves Edisto before 6:00 a.m. and returns to the island about 5:00 p.m. with a fare of $2.00 per person per round trip.

A mother with a large family can hardly afford visits to a pediatric clinic, nor can she safely leave unattended children at home for the necessary 12 hour trip. With such problems, is it any wonder that many appointments are missed? A possible solution might be to collect clinic patients in the regular school buses which could take them to public schools where a single bus might transport patients to Charleston. The latter bus service should be so arranged that clinic patients could be seen and returned to the Edisto Island Schools prior to regular school bus departure.

Once they arrived at the facility four-fifths of the indigent received medical care but one-fifth were turned away. Those who were turned away stated that the facilities were overcrowded that day or that they had arrived out of phase with the enigmatic schedule.

Table 4

Question
Are you satisfied with the services?

	Urban %	Rural %
No	11.1	2.1
Satisfied	50.8	68.8
Partly satisfied	22.2	27.1
Not ascertained	15.9	2.1

Indigent consumers are more tolerant than most. Only two-thirds of sample families felt that they had to wait excessively before seeing a physician. Most who waited excessively, almost 40 per cent of the sample, felt that there was a simple reason for their long waits, too few doctors and too many patients. However, a few were more critical; one-eighth of the sample thought that waiting was due to physicians wasting time by arriving late, talking, and drinking coffee.

A small but significant percentage of patients felt that the medical history was just more clinic red tape that was senseless. Clearly, a segment of our indigent population is totally unaware that a good medical history is most often the key to accurate diagnosis. A simple statement by the physician explaining the purpose of questioning might correct this misunderstanding.

Only a small proportion of the sample was dissatisfied with the medical care they received, but a significant portion refused to comment, as shown in Table 4. Over three-quarters of the families who used the facilities felt doctors and nurses were courteous, had helped their physical ailments, and had shown a personal interest in them beyond professional duty. On the other hand, admission clerks were often thought to be curt rather than courteous.

One-third of urban families and one-tenth of rural families did not use public facilities but usually obtained care from a private physician. This observation suggests that private physicians in Charleston County continue to care for a substantial portion of the indigent sick with little or no compensation. In many other counties of South Carolina which have fewer public facilities, private physicians carry almost the entire burden.

Table 5

Average Number of Physician or Clinic Visits Per Patient Per Year

Area or Group	Visits Per Year	Year
United States	5.3	1960
Southwide	4.3	1960
Military Dependents (Charleston County)	4.7	1966
Charleston County Indigent	1.7-2.4	1966

The indigent patient, Caucasian or Negro, receives quantitatively less medical care than does the average population. One index of care is the number of facility or physician visits per patient per year. As shown in Table 5, the indigent of Charleston County at best have about

half the health care that is available to the general population.

This report has pointed out certain problem areas as perceived by the consumer. An expression of professional interest in helping the community solve these problems would not only benefit the patient and make our health care efforts more effective but could also mitigate rising criticism of physicians whom the public often holds responsible for every increment in medical care costs and the rising crisis in health manpower.

Summary

One hundred and fifty medically indigent Charleston County Negro families were interviewed in an attempt to gain insights into their views of health services. Perception of illness, communication with health personnel, transportation to health facilities, enigmatic clinic schedules, unsympathetic admissions clerks, long waiting times in overcrowded clinics, and failure to understand the purpose of the medical history were major areas of difficulty. Private physicians were found to care for a significant portion of the medically indigent. Suggestions are presented which could ameliorate these problems.

Attention

Interns and Residents

Please consider Conway, S. C.! There is an immediate need for General Practictioners, an Internist and an Orthopedist in this town of 10,000 people. Conway Hospital is a 180 bed General Hospital serving an area of 50,000 people, with an active and progressive Medical Staff. All members of the Medical Staff are swamped with patients and a sincere welcome awaits your inquiry.

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Dr. John Wilson—Internist—Phone 249-6661

THE IMMUNOGLOBULINS IN HEALTH AND DISEASE

W. McA. DAVIS, M.D.

Prior to 1959[1] the very term immunoglobulin was unknown and only a few basic scientists were involved in studying these proteins. Now it is virtually impossible to pick up any clinical journal without seeing an article devoted to some aspect of the subject. Thus it seems appropriate to devote some time to a review of this type in order to summarize some of the major features known about the system and to discuss some of its abnormalities.

Just what are the immunoglobulins? In the 1930's Tiselius used an electrophoretic process to separate the serum proteins into albumin and 3 globulin fractions, which he arbitrarily named alpha, beta, and gamma. It became evident that the gamma region consists solely of the products of the body's reactions to foreign substances, namely antibodies. These circulating antibodies are the immunoglobulins. They have been separated into a number of classes on the basis of their molecular weights and antigenic properties. (Fig. 1)

Despite the variations necessary to allow for flexibility in the system, there is a uniformity of structure among the immunoglobulins. The basic unit consists of 2 long polypeptide chains, the H or heavy chains, and 2 short ones, the L or light chains, all united by disulfide bonds. The heavy chain is distinctive for each class of immunoglobulin, while the same light chains, in one of two forms (kappa or lambda) are found in all classes. A homogeneous concentration of light chains of one type found in the urine is known as Bence-Jones Protein.

The larger immunoglobulin molecules, IgM and IgA, consist of polymers of this basic unit. IgA differs from the others in being secreted in high concentration onto mucosal surfaces which are in contact with the external environment in the respiratory and gastrointestinal tracts.[2] By this means the individual is protected from the many foreign antigens constantly being inhaled and ingested.

It is now well established that antibodies are produced in plasma cells. A single plasma cell produces a single class of heavy chain and a single class of light chain. Thus there is a large population of cells in the body, each capable of producing only a single category of antibody. An antigen may stimulate a variety of types of cell which results in the production of a number of antibody categories and produces the electrophoretic pattern known as polyclonal or diffuse hypergammaglobulinemia, signifying the diversity of cell clones involved in the response. This is the pattern seen in many chronic infections, chronic liver disease (especially portal cirrhosis and "lupoid" hepatitis), and many of the collagen diseases. All categories of immunoglobulin are usually elevated, with IgG predominating.

In contrast, there is another pattern, caused by neoplastic proliferation of plasma cells, with the production of a high concentration of homogeneous immunoglobulin, seen on electrophoresis as a tall narrow spike or "M" protein. This is the monoclonal pattern typically seen in multiple myeloma and macroglobu-

From the Department of Clinical Pathology Medical College of South Carolina

THE IMMUNOGLOBULINS

Class	Synonyms	Mol. Wt.	Mean Conc.	Antibody Activity
IgA	gamma A, $gamma_1A$, $beta_2A$	160,000	180mg/100ml	isohemagglutinins antinuclear rheumatoid factor anti-insulin antithyroglobulin antiragweed anti-intrinsic factor antiviral antibacterial
IgG	gamma G, 7S $gamma_2$, $gamma_{ss}$	160,000	1000mg/1000ml	antiviral antibacterial antitoxin
IgM	gamma M, 19S, $gamma_1M$, $beta_2M$	900,000	100mg/100ml	natural isohemagglutims cold agglutinins rheumatoid factor antibacterial
IgD	gamma D	160,000	3mg/100ml	?
IgE	gamma E	?	?	?

linemia of Waldenstrom, and less often in some lymphomas and leukemias. Any of these conditions may be accompanied by Bence-Jones proteinuria, and the prognosis is directly related to the amount excreted.

Multiple myeloma can have a variable asymptomatic interval, in which the only abnormality is an increased sedimentation rate, abnormal protein on electrophoresis, or Bence-Jones proteinuria. The type of myeloma category depends on the class of immunoglobulin produced, either IgA or IgG. Recently a few cases of myeloma with IgD production have been described,[3] but the clinical course is no different for the various types.

The "M" protein produced in Waldenstrom's disease is IgM. The symptoms of Raynaud's phenomena, mucosal bleeding episodes, and bizarre neurologic manifestations can all be attributed to the increased serum viscosity due to the high concentration of macroglobulin present.

There are several uncommon variants of these plasma cell dyscrasias in which only a fragment of the immunoglobulin molecule is synthesized by the neoplastic cells. The first is Franklin's disease or heavy chain disease,[4] which often presents itself as a case of lymphoma with an elevated serum protein. The cells produce only a piece of the heavy chain, not the whole molecule. These patients have increased susceptibility to infections, and frequently die with bacterial pneumonia. Another variant is known as light chain disease or micromolecular paraproteinemia, which starts like multiple myeloma, with bone pain (due to lytic bone lesions), anemia, or proteinuria.[5] Instead of hypergammaglobulinemia, though, these patients have hypogammaglobulinemia. The tumor cells produce large quantities of light chains, which, being of small size, pass the glomerular membrane readily into the urine, accounting for the high concentration of Bence-Jones protein which these patients demonstrate.

One last category of patients who have an "M" protein on electrophoresis are those who fail to reveal any cause for it, even after extensive workup. These are examples of idiopathic paraproteinemia, or benign monoclonal gammopathy. In one series of such cases found incidentally, with further study about 40% were found to have some type of malignant process, mostly multiple myeloma. Fewer had macroglobulinemia, lymphomas or even epithelial malignancies of the gastrointestinal tract or lung. The remainder

had no disease which could account for the abnormal protein. The concentration of the protein correlates with the likelihood of malignancy, 700 mg 100 ml being the dividing point.

A different category of diseases involving abnormalities of th immunoglobulin system are the antibody deficiency syndromes. Before discussing these we need to consider the normal development of the system first.

Normal newborn serum contains IgG derived from the mother by active transport across the placenta.[6] This falls during the first months of life, with a half-disappearance time of about 23 days[7] to reach a low at 3 months, by which time active production begins to take over. About 75% of adult levels are reached by 1 year, and all adult levels by age 7. The normal mean concentration is 1000 mg with a range of 700-1500 mg.

IgA is usually undetectible in newborn serum unless the mother has had an infection during late gestation. Beginning after the first week, the IgA level slowly increases to reach adult levels by 14 years. The normal mean concentration is about 200 mg with a range of 100-500 mg.

IgM is made by the fetus in low quantities late in gestation. After birth it increases rapidly to reach adult levels by 1 to 2 years. Normal levels are about 100 mg with a range of 50-200 mg. A level greater than 20 mg in the newborn strongly suggests the occurrence of intrauterine infection, especially rubella, syphilis, cytomegalo-virus, or acute bacterial infection acquired shortly before or during delivery.

Sometimes the normal infant is slow in developing the ability for active antibody production, causing transient hypogammaglobulinemia.

In the rare sex-linked congenital agammaglobulinemia, there is marked susceptibility to recurrent infections with the pyogenic cocci. Normal resistance to viruses and normal cellular immunity are present. The diagnosis rests on the laboratory finding of less than 100 mg of IgG.[8]

There is also a primary acquired type of hypogammaglobulinemia which occurs in previously normal adults. Many have sprue-like symptoms, granulomas in various organs, and subsequently develop lymphoma or leukemia. Other patients develop hypogammaglobulinemia and increased susceptibility to infection due to some other disease process causing loss or decreased production of normal gamma globulin.

Other types of antibody deficiency syndrome known as dysgammaglobulinemias have a selective absence or decrease of one or two of the main immunoglobulins, although the total concentration of gamma globulin may still be within normal limits. (Fig. 2) The ultimate diagnosis depends on identification of the deficient immunoglobulin.

DYSGAMMAGLOBULINEMIAS

Decrease or absence of 1 or 2 of immunoglobulins.
Total gamma globulin level may be in normal range.

Type 1: Decreased IgA and IgG, elevated IgM (100-1000 mg/100ml, diffuse),
- Congenital or acquired
- Bacterial susceptibility
- Hemolytic anemia, thrombocytopenia, neutropenia

Type 2: Decreased IgA and IgM, normal IgG.
- IgG may lack antibody activity.
- Sprue-like syndrome with nodular lymphoid hyperplasia of intestinal tract.

Type 3: Isolated lack of IgA.
- Occurs in some normal persons.
- High percentage of patients with ataxia
- Telangiectasia (severe sinobronchopulmonary infections)

The final type of antibody deficient syndrome to be discussed is hereditary thymic aplasia, or Swiss type agammaglobulinemia. The sine qua non for the diagnosis is absence of cellular immunity. Autopsy reveals lack of lymphoid tissue throughout the body and a rudimentary thymus. From the study of these patients and subsequent animal ex-

periments it has become apparent that the thymus plays a fundamental role in effecting the distribution and immunologic competence of lymphocytes and plasma cells. The precise mechanism whereby this is accomplished has not yet been established.

Thus, even though tremendous advances have been made in understanding this system, much more remains to be known. It has been postulated that this elaborate defense mechanism arose not for protection from the external but from the internal environment, because of the selective advantage it offered those capable of eliminating mutant, potentially malignant, cell lines from the body. The possibility of thus treating or even preventing neoplasms is raised but little has been accomplished in this area.

Another field of application is that of organ transplants, in which the physician finds himself attempting to neutralize a force older than man himself, namely, the rejection of foreign tissue. Obviously, the surface has hardly been scratched and more remains unknown than has yet been discovered.

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Treatment of Classical Phenylketonuria—M. S. McBean and J. B. P. Stephenson Arch Dis Child 53:1-7 (Feb) 1968.

Thirty-one children with classical or "true" phenylketonuria were treated by low-phenylalanine diet and assessed after at least one year. Four points emerge: (1) Patients treated from the first three months of life retain near-normal intelligence. Delay of a few weeks after birth is not obviously harmful. (2) Elevated serum phenylalanine levels after infancy are associated with lower resultant intelligence quotients. Persistently low serum phenylalanine levels in infancy may be equally harmful. (3) Dramatic improvement in behavior, school progress, or intelligence quotient may occur in older children. (4) Stopping the diet may be dangerous; the intelligence quotient of one 2-year-old declined steadily, but the trend was reversed when the diet was renewed. A review of 102 treated cases, intelligence-tested after 2 years of age, confirms the value of early phenylalanine limitation.

MULTIPLE DOSE VIALS:

A SOURCE OF CONTAMINATION?

CHARLES E. CORLEY, M.D.
JOHN P. MANOS, M.D.
JOHN D. THOMAS, M.D.*

During the daily course of clinical anesthesia at the Medical College Hospital, many agents are used from multiple dose containers. It is our practice to attempt sterilization of the rubber stopper by wiping it with an alcohol dab (70% isopropyl alcohol solution) before use and also our practice to use disposable needles and syringes. With the possibility of numerous individuals with varying aseptic technics being involved in the handling of these multiple dose containers, the question arose as to the sterility of the solutions remaining after multiple enterings. There was also the question of the efficacy of our aseptic technics. At the end of an operating day, there might be a considerable quantity of possibly contaminated drugs. Were we justified in the reuse of these drugs another day or should these drugs be discarded?

It has been well documented that the multiple dose syringe and needle have been responsible for the transmission of viral hepatitis and suspected in the transmission of other infectious diseases. Because of this fact, the disposable syringes and disposable needles were developed and established. On the other hand, the contents of multiple dose vials have been rarely incriminated in disease transmission. A search of the literature disclosed how little knowledge there is regarding bacterial contamination in multiple dose vials. The few studies that have been conducted have resulted in conflicting conclusions.

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Evans,[1] in 1945, reported on two cases of meningitis that he attributed to contamination of needles, syringes, or the diluent, water for injection. There have also been several reports in the foreign literature that have implicated diluting fluids as being frequently unsterile.[2]

A check on the agents used as multiple dose medications will reveal that there are a number of different preservative systems in use. It will also be noted that the same preservative will be used in varying concentrations. Here again, information is sparse regarding proper studies for the evaluation of preservatives as used in multiple dose vial medications. A group from the University of Colorado School of Medicine conducted a study on 490 vials of varying injections for possible bacterial contamination while in clinical use.[2] Thirteen vials were found to be contaminated. Sodium chloride injection and water for injection showed the highest incidence of contamination that was of any statistical value. No common microorganism predominated, but there was a common denominator in regard to the preservative used and the concentration of the preservative used. It was the conclusion of their study that a further look and evaluation into the preservative systems used in multiple dose vials was indicated.

In 1958, Young and Brehm[3] conducted a study of possible bacterial contamination in remaining multiple dose medications. They made spot check cultures on their used vials and found no contamination. Then with deliberate gross contamination of ten selected drugs (Pontocaine [tetracaine], Nembutal [pentobarbital]

Xylocaine, [lidocaine], in varying concentrations with and without epinephrine, atropine, Syncurine, [decamethonium] tubocurarine, Flaxedil [gallamine], and Pentothal [thiopental], it was found, with one exception (Pontocaine), that all the agents were practically sterile by the end of one day and that Pontocaine was sterile at the end of two days. They concluded that there appears to be a fairly rapid self-sterilizing activity in all the ten selected agents used in their study. It will be noted that sodium chloride injection and water for injection were not included as part of the above study.

Another investigation[4] discusses briefly multiple dose vial contamination and suggests that perhaps a practical compromise regarding the use of multiple dose vials would be to set an arbitrary time limit such as two weeks (this being about the upper limit necessary for slow growing, cold-resistant bacteria to become manifest). At the end of this time, it would be more meaningful to note whether or not there had been any significant changes in the physical characteristics of the solution in the vials and such changes would automatically prohibit further use of the medication.

A study by Rosenweig,[5] in 1964, on the rubber stopper used on multiple dose vials, heretofore thought to be a satisfactory seal, revealed that out of some 214 vials selected at random for leakage and culture studies, 21 showed leakage through the needle tracts resulting from one or more punctures. Only two of the group cultured showed any contamination. It was the conclusion of this study that single dose vials were the preferred method for dispensing parenteral drugs.

Because of our concern about possible contaminated parenteral injections, we decided to study the multiple dose vials used in our practice.

Methods and Results:

The first part of the study consisted of cultures made from a variety of solutions from clinically used containers. These used vials were collected over a two months period. Anesthesia personnel were advised to leave the remaining one or two ml in each of the vials. They were not told the purpose of the collection in order to minimize the chance that extra careful aseptic technic would be exercised. One ml of each solution was withdrawn with disposable needle and syringe after the rubber stopper had been wiped with 70% ethyl alcohol sponges. This one ml was injected into standard thioglycollate broth and incubated at 37°C. for 72 hours. All the cultured broths remained negative for growth.

The agents studied were succinylcholine chloride (Anectine), tubocurarine chloride, chloroprocaine hydrochloride (Nesacaine), water for injection, sodium chloride injection, sodium heparin (Lipohepin), hexafluorenium bromide (Mylaxen), atropine sulfate, metaraminal (Pressonex), metaraminal (Aramine), ammonium sulfate 6 per cent, aminocaporic acid (Amicar), lidocaine 1 per cent (Xylocaine), and protamine sulfate.

In the second part of the study, equal amounts of our five most commonly used multiple dose medications were inoculated with a known quantity of bacteria to check bacterial survival in each solution.

A standard 18-hour mixed broth culture of Staph. aureus and E. coli were used as the bacterial inoculum. Serial dilutions [(in saline) (10^{-1} — 10^{-10})] were made of the broth culture and standard nutrient agar pour plates of the serial dilutions were made in duplicate. These were incubated at 37° C. for 48 hours. This was done for the purpose of counting the bacteria in each inoculum. Four different 18-hour mixed broth cultures were used. All four of the 18-hour cultures contained approximately the same number of organisms per ml as indicated by Table 1.

Table 1

Number of Organisms Per Inoculum As Determined by Pour Plate Method

Drug	Number Organisms in 1 ml/4 ml Drug
Succinylcholine chloride (Anectine)	1.9 billion
Chloroprocaine hydrochloride, (Nesacaine)	1.2 billion
Tubocurarine chloride	1 billion
Water for injection	1.3 billion
Sodium chloride injection	1.3 billion

Into each of 5 tubes containing 4 ml of undiluted test medication, one ml of each of the first five dilutions of 18-hour broth culture were inoculated, e.g., one ml of 10^{-1} dilution into one tube containing 4 ml of test medication, one ml of 10^{-2}

dilution into another tube containing 4 ml of test medication, etc.

These tubes were then incubated at room temperature for seven days. Room temperature was used as we felt this simulated actual clinical conditions. At the end of the week's incubation, ten fold serial dilutions (in saline) were made of each of the 5 tubes. Again, using standard pour plate technics, duplicates of each dilution of each tube were made. These pour plates were incubated at 37°C. for 48 hours and the surviving organisms were counted. Table 2 illustrates the results; succinylcholine chloride showed the highest number of bacteria surviving with 8 x 10^5 or 0.4% of the original inoculum. Water for injection and sodium chloride injection showed a smaller number surviving, 0.01 per cent and 0.03 per cent, respectively. Chloroprocaine and tubocurarine showed no survival at the end of seven days' incubation.

Table 2

Bacterial Survival in Multiple Dose Medications Following Bacterial Seeding

Drug	Percent Killed in 7 days
Succinylcholine chloride, (Anectine)	99.6%
Chloroprocaine hydrochloride, (Nesacaine)	100%
Tubocurarine chloride	100%
Water for injection	99.99%
Sodium chloride injection	99.97%

Discussion:

Conclusions which may be drawn from the foregoing data are: (1) none of the medications tested acted as a nutrient medium for the bacteria; (2) since there was a sharp decline in the bacterial population, all of the medications tested appeared to have bactericidal properties. The number of bacteria used for the inoculation of our test medications was considerably larger than any conceivable accidental inoculation which might occur during the actual use of these vials. Our inoculum would be analogous to injecting a ml of pus into a vial. In spite of the relatively large number of bacteria introduced, tubocurarine and Nesacaine showed complete sterilization in seven days. Sodium chloride, water, and Anectine showed a very small percentage of the bacteria surviving after seven days.

No attempt was made to evaluate the factors that make each solution bactericidal. Tubocurarine, sodium chloride, and water used 0.9% benzyl alcohol as their preservative. The fact that no bacteria survived in tubocurarine and a small percent survived in sodium chloride and water infers that tubocurarine has an inherent bactericidal property. Nesacaine and Anectine used the same preservative, 0.1% methyparaben. No bacteria survived in Nesacaine, whereas a small percentage survived in Anectine. It is possible that Nesacaine has bactericidal properties of its own. It is also known that Anectine is a heat labile drug and the test being conducted at room temperature may have accounted for the decrease in bactericidal property of Anectine. It is conceivable that the breakdown products of Anectine somehow interfered with the action of the preservative. It could also be that methyparaben 0.1% is unable to contend with such gross contamination.

Accidental contamination of vials which are punctured a number of times may occur. The bactericidal properties of these solutions tested is a prime factor in preventing infections from this source.

With gross contamination of the five medications tested, the smallest per cent of organism killed by any one medication was 99.6%. The bacteria used, Staph aureus and E. coli are both hardy, common hospital bacteria. Since there were few survivors at seven days, the medications tested may be considered highly bactericidal at the end of one week.

The bactericidal properties of each medication in 30 minutes, two hours, or one day is not answered by our study.

Some caution should be exercised in the repeated use of Anectine, sodium chloride, and water. However, it must be tempered by the knowledge that these drugs were practically sterile after gross contamination and that all spot cultures of the clinically used vials were sterile.

Knowing that these drugs are highly bactericidal should comfort us, but should not in any way lower our standards for asepsis.

Summary:

Two groups of tests were made to determine the sterility or contamination of selected medications in multiple dose vials used in clinical anesthesia.

The first test composed of spot check cultures of 263 solutions used clinically during a two month period.

The second test consisted of bacterial counts at the end of seven days' incubation at room temperature on five selected agents with known numbers of Staph. aureus and E. coli.

Conclusions:

Spot checks of clinically used multiple dose vials showed no contamination.

Deliberate gross contamination of the selected multiple dose medications showed two of the medications to be sterile after seven days' incubation. Of the remaining three medications, Anectine showed the greatest number of bacteria surviving, with 0.4% of the original inoculum present at the end of the seven days' incubation.

There appears to be a bactericidal property inherent to tubocurarine.

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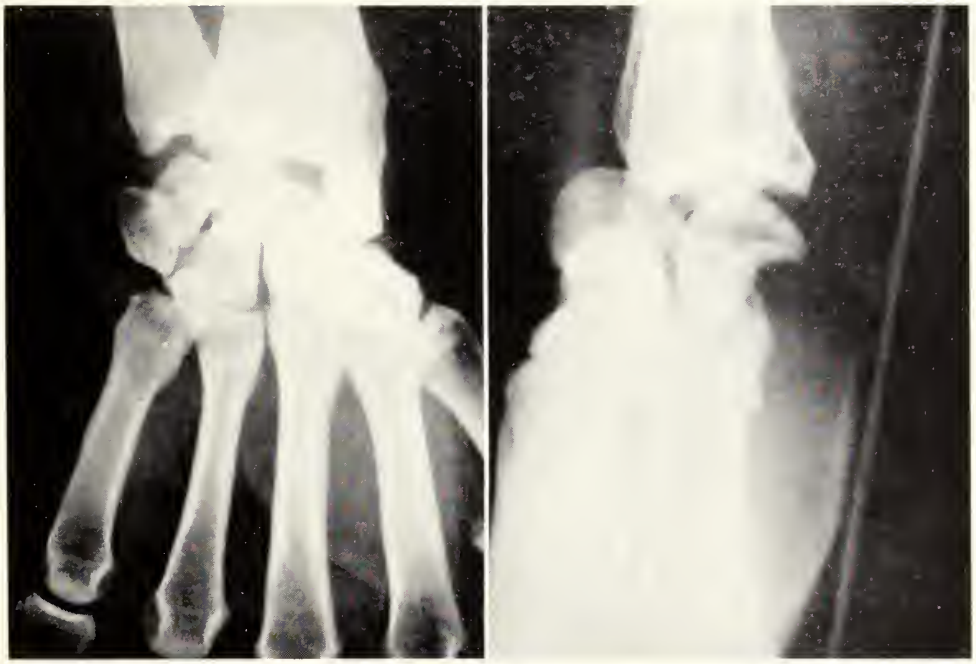
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Arcus Not So Senilis—P. V. J. Macaraeg, L. Lasagna, and B. Snyder Ann Intern Med 68:345-354 (Feb) 1968

A survey of two populations of Negroes and whites was done to quantify the prevalence of corneal arcus. One group consisted of hospital patients who were examined for the presence of arcus and their charts reviewed for a history of angina, myocardial infarction or stroke, and evidence of abnormal fasting blood sugar, electrocardiograms, or blood pressure. Children were examined solely for the presence of arcus. A different population of Negroes and whites, both more economically homogeneous and free of serious disease, were examined for the presence of arcus, blood pressure was obtained, and annual income ranges were recorded. Results revealed a higher frequency of corneal arcus in the Negro. While both races show a tendency to develop the lesion with advancing age, some Negroes will show lesions relatively early in life. The corneal lesion seems not to be a useful predictor of diastolic hypertension, myocardial infarction, or cerebrovascular accidents. In the Negro at least the development of arcus may be genetically determined. It would appear desirable to label this lesion arcus corneae rather than arcus senilis.

X-RAY FILMS OF THE MONTH

S. E. PUCKETTE, JR., M.D.
Medical College Hospital
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These films of the wrist were taken on a 42 year old white male who fell on his outstretched hand. A "silver fork" deformity, tenderness and swelling were present in this region of the carpal bones.

This patient has a perilunar dislocation. Here, the lunate has maintained its usual relationship with the radius, but the rest of the carpal bones are dislocated posteriorly about it. As the clinical appearance is fairly similar to a Colles' fracture, one may focus attention on the distal radius and ulna, thus overlooking it. The lateral film is the more informative of the views taken. A somewhat similar injury is a lunate dislocation. Here, the lunate is dislocated, both in relationship to the other carpal bones and to the radius.

Both the lunate and perilunate dislocation are often associated with fractures of the navicula and/or the styloid process of the distal radius and ulna.

Treatment consists primarily of closed reduction, preferrably under anesthesia, with plaster cast immobilization. In some cases, open reduction will be necessary.

President's Pages



Dear Doctor Wyman:

In my daily work of calling on physicians, I have an opportunity to hear comments and conversations between patients which the physicians themselves do not hear. Doctors are used to hearing the jokes about how rich they are, how they take everybody's money, how he drives the big car, etc. I am not referring to these jokes, however. I am referring to the serious, vicious comments about the same subjects, but not made in a joking manner.

Why am I concerned about this? Because enough of these disgruntled people can hasten the day of government controlled medicare for us all—one of the worst things that could happen to the American people.

My purpose for writing is to offer one suggestion for changing the attitude of people toward the spending of their money for medical care. Any reasonable person knows that he should budget his money for medical care just as he does for his electricity, food or car payments. But most people don't. Then when he has to go to the doctor and has to pay $7.00 for the visit, he gets mad because he would rather spend the money some other way.

The general public has not been educated to the facts that:

1. His health is his most valuable asset
2. American doctors (and medical care in general) are the finest in the world
3. Americans should be proud and grateful that they live in a land that offers them this unexcelled medical care
4. To be able to spend a small portion of his money for this unexcelled medical care by the doctor of his choice, to maintain his health, is truly one of the greatest blessings Americans have today.

Getting these points across must be an educational process that will not only produce youngsters with the right attitude, but it should change the current antagonistic attitude of many adults. There are, no doubt, many ways it can be done—using television, billboards and other mass communications media. I offer one specific recommendation here.

In Anderson nearly every doctor and dentist recently displayed a large sign in his office which said, "WE SUPPORT FLUORIDATION". In the referendum following, fluoridation was overwhelmingly approved for the city water supply. I expect that many people gazed upon that sign for long periods while waiting his turn to see the doctor. It had its effect!

Nearly everybody goes to the doctor, sooner or later. Why couldn't a sign be placed in every doctor's office, to be gazed upon for long periods by some, which says something like this:

1. ISN'T AMERICA GREAT? YOU CAN GO TO THE DOCTOR OF YOUR CHOICE!

2. AMERICAN MEDICAL CARE IS THE BEST IN THE WORLD. WOULD YOU LIKE TO SETTLE FOR LESS THAN THE BEST? IT'S CHEAPER!

3. WHEN YOU SPEND YOUR MONEY FOR MEDICAL CARE ISN'T IT NICE TO KNOW YOU SPENT IT FOR THE WORLD'S BEST!

4. IF WE LIVED ANYWHERE ELSE IN THE WORLD, WE COULD NOT GET BETTER MEDICAL CARE—NO MATTER HOW MUCH WE PAID FOR IT!

These are just suggestions which should get the point across. Perhaps some others would be better. However, for the program to be successful, I would like to make two other suggestions:

1. The same program should be used in every doctor's office in the state in order to create a united front.

2. If signs are displayed, they should be LARGE (at least two feet by two feet), so they can be seen and demonstrate that the doctor means it and is behind the message.

The medical profession is now receiving very little praise from the general public. Complaints about the cost of hospital care, doctors' fees and drug prices are common. It seems to me that a concerted effort should be made now by the medical profession to try to change these attitudes. The alternative will be eventually for all of us to be on the Federal payroll. If that happened, you could not put up these signs. Their message would no longer be true.

Sincerely,
A Sales Representative

Comments, anyone? The Public Relations Committee of the South Carolina Medical Association will welcome any suggestions you may have.

Joel W. Wyman, President

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50 YEARS AGO

The Journal of the South Carolina Medical Association

November 1918

The value of whiskey in treating influenza and pneumonia was debated at some length.

Editorials

Wilbur Cohen to L. B. J.

In a communication to the President, Mr. Cohen says "it is now essential that the Federal Government take steps to make certain that the best possible use is made of the available and anticipated fund of health resources, not only those under the direct control of the Federal Government, but also those in the private health sector, in State and local health departments, and in nonprofit and voluntary health agencies and organizations."

". . . there does not now exist an adequate mechanism for comprehensive assessment of national health problems and needs and of the most efficient and economical approaches toward dealing with them . . . for example,

1. The drafting of physicians by the Department of Defense to provide care for civilian dependents in the United States. This allocation of a portion of the critically scarce physician pool materially affects programs intended to make health care as widely available as possible, a national health goal that goes far beyond the mission of the Department of Defense;

2. The manner in which the Department of Defense makes hospital care available at low cost for retirees and their dependents, thus creating a demand for additional DOD hospital construction when community facilities are available;

3. The decision that the Federal Government will provide, through the Veterans Administration, treatment of VA beneficiaries suffering kidney disease without making this expensive and life-saving care (kidney dialysis) available to other members of the population in need of it. . . ."

Surprise?

Medicare Increase Announced . . . In a speech to the American Hospital Association, HEW Secretary, Wilbur J. Cohen, announced that medicare hospital benefits would cost the elderly more beginning January 1, 1969. . . . In an address at AHA's 70th Annual Meeting, the Secretary stated that the patient would pay the first $44 (presently $40) of his hospital bill; $11 per day, rather than $10, for hospitalization beginning with the 61st day and continuing through the 90th day; and $22 per day, rather than $20, for the next 60 days thereafter. The rate for care in a nursing home, beginning with the 21st day, would be raised from $5 to $5.50. . . . In explaining the increase, Mr. Cohen pointed to the rise in hospital costs citing that the average hospital stay of a medicare beneficiary costs $600. . . . Mr. Cohen concluded that he favored the extension of health insurance so that by 1976, every American has coverage.

TERMINAL CASE

By Robert Quinn, M.D.

The room redolent of memory of roses,
She, fragrant vestigial of former flower,
Sitting, dusk-blurred, in covertly calm
poses,
We spoke slowly, knowing the lateness of
the hour.

PART-TIME FACULTY PARTICIPATION IN TEACHING PROGRAMS*

The present practice in some medical schools for clinical departments to limit severely the participation of the part-time faculty in teaching activities deprives the students and house staff of instruction derived from experience not generally obtainable in a teaching hospital. Such a policy is unsound from both educational and professional standpoints. It is not in the best interest of the school or the public.

The part-time faculty consists of specialists who have acquired professional recognition as evidenced by publications in their field, society memberships, and the confidence of the local profession. Because of their availability and close contact with the public, their practices consist predominantly of patients with the more common diseases or with acute conditions, and are characterized by the care of the same patients and families over a period of years for the same or different illnesses. Their specialty training has been taken in university-affiliated hospitals or large private clinics. In most cases they have participated in the teaching program and often in research. From the standpoint of scientific interest, professional prestige, and in some cases mainly altruistic motives, many would like to continue some degree of activity in the field of education. For this purpose they become part-time members of the medical school faculty. Some lose interest, generally as their practices develop; however, others consider active participation in the teaching program to be of importance throughout their professional career.

These specialists can render a particularly valuable service by conducting lectures, demonstrations, and conferences in areas in which they have gained professional recognition as well as on those subjects common to their practices but not generally encountered in a medical school hospital. In some areas their teaching is complementary to that of the full-time faculty, in others where there is an overlapping of interest, the varying experience of the 2 groups leads to healthy divergence of opinion. Ward rounds by part-time faculty members provide an opportunity for the expression of opinions other than those of the attending staff. As most students and house staff will engage in some form of private practice, they should be given the benefit of instruction by physicians who are experienced in its various aspects.

Physicians on the part-time faculty are able to make firm teaching commitments if schedules are set in advance; however, fulfilling office responsibilities and visiting patients in other hospitals limit their availability for assignments upon short notice. Although partnership or group practice arrangements reduce the problem of emergencies impinging on teaching commitments, there are situations which require that the physician take direct personal responsibility; therefore, some provision for substitute teaching coverage should be made by him or by the clinical department. Teaching assignments spaced over a length of time interfere less with office responsibilities and hospital obligations than intensive short-term schedules and accordingly are generally preferred by part-time faculty. Interest in the teaching program is reflected by a sense of responsibility in meeting commitments.

If part-time faculty members are to contribute effectively to the teaching program, they must be made to feel that they are on the active staff. They should be included in conferences concerning student teaching and residency training and should have an opportunity to express their ideas. Hospital privileges are important from the standpoint of professional recognition; in addition, they en-

*Reprinted from The Journal of Medical Education, 43:749-750.

able the part-time faculty to become familiar with the ward teaching and to get to know the members of the house staff. Nothing is as effective in promoting accord between the full-time staff and the part-time staff as their working together on the same wards and in the same operating rooms. Part-time staff people should be encouraged to submit clinical articles for publication and to do laboratory research by making adequate facilities available to them.

As has been noted, effective participation by part-time faculty complements the teaching of the full-time faculty and in this as well as in other respects produces a better balanced program. It also constitutes a valuable form of continuing medical education for an important segment of the local physicians in private practice. There results a closer and more healthy relationship between "town and gown." The public is favorably impressed by the school's making use of all available qualified physicians in its educational program. The department is in a better position to take care of an increase in the number of students and members of the house staff.

WILLIAM H. PRIOLEAU, M.D., F.A.C.S.
Clinical Professor of Surgery
Medical College of South Carolina

ESTABLISHMENT OF NEW AMA DIVISION OF PUBLIC AFFAIRS

At the June, 1968 meeting of the House of Delegates, a resolution introduced by the Illinois delegation (No. 62) was passed, calling for development of public affairs program within the AMA.

An important consideration made early implementation of Resolution 62 especially urgent. The Director of the Division of Field Service, Aubrey Gates, will reach retirement age in May, 1969. The activities of this Division are integral to any public affairs program. It was vital that planning for the transition be immediate.

Although a management consulting firm is about to be assigned the task of developing recommendations for administration of the AMA, the Board felt its responsibility called for action now to establish an effective public affairs structure.

The new Division of Public Affairs, effective September 23, assumed the functions of the Division of Field Service, and amalgamated the AMA and AMPAC field staffs into one. It will assume broader responsibilities in the public affairs area. These include community, civic, and governmental activities, all of which are important to the medical profession and its ability to provide health care for the American people. Specifically, the new division will be charged with implementing AMA policy as it affects continuing relations between medicine and government, and be responsible for many of the education and research programs formerly conducted by AMPAC.

As AMA salaried employees, the field staff of the Division of Public Affairs will not, of course, engage in political activities of supporting candidates for nomination or election to public office. Such activities will continue exclusively as AMPAC functions.

This move is practical and logical, and will result in better staff coordination, administrative efficiency and economic operation. When fully operative, the Public Affairs Division will not only be capable of providing better legislative, and socio-economic services to the constituent and component medical societies, but coordinate them better from the management to the field levels.

AMPAC will maintain its individual entity as an organization separate from the AMA and governed by its own Board of Directors. As in the past, it will function as the political action arm of organized medicine.

Joe D. Miller, formerly the Executive Director of AMPAC, is the new division's director; and Aubrey Gates is now Executive Assistant in the office of the Executive Vice President.

The AMPAC Board of Directors has named D. W. Powers as Acting Executive Director.

MINUTES OF COUNCIL

SOUTH CAROLINA MEDICAL ASSOCIATION

Columbia, South Carolina July 10, 1968

The meeting of Council of the South Carolina Medical Association was held at 2:00 p.m., July 10, 1968, at the Sims Building, 2600 Bull Street, Columbia, with Dr. John B. Booker, Chairman, presiding. Dr. Martin Teague gave the invocation.

Present: Dr. John P. Booker, Chairman, Dr. Martin M. Teague, Vice-Chairman, Dr. Joel W. Wyman, President of SCMA, Dr. C. Tucker Weston, Vice-President of SCMA, Dr. J. I. Waring, Editor of SCMA Journal, Dr. Clay Evatt, Dr. Waitus O. Tanner, Dr. John N. Gaston, Jr., Dr. J. Harvey Atwill, Dr. Harold P. Hope, Dr. Joseph P. Cain, Jr., Dr. Thomas Parker, Dr. Michael Holmes, Dr. J. D. Gilland, Mr. M. L. Meadors, Executive Secretary, and Dr. Strother Pope, Secretary.

Absent: Dr. W. L. Perry, President-Elect of SCMA, Dr. George D. Johnson and Dr. J. Hal Jameson.

Minutes of the previous meeting were approved with a minor correction.

Committee appointments were made: (See this JOURNAL)

Dr. Joel W. Wyman announced that he had appointed Dr. William Perry Chairman on the AAPS Essay Contest. Appointment approved.

Dr. Wyman also announced that he had appointed Dr. O. B. Mayer and Dr. R. P. Watson to represent the SCMA on the Council on Aging. These appointments were approved.

Dr. D. Strother Pope, Chairman, Dr. Waitus O. Tanner, and Dr. C. Tucker Weston were appointed as a committee to work iwth DPW on Title XIX.

Internal Revenue Service's policies regarding deductions for physician's automobiles were discussed. Dr. Atwill made a motion that this be held in abeyance until Dr. George D. Johnson's resolution is introduced at the AMA meeting in Miami in December. Dr. Gaston seconded the motion. Motion carried.

Dr. Dunn, representative of The Travelers Insurance Company, discussed the Title XIX program. The Travelers Insurance Comany, as intermediary, will handle the billing for this program. Usual and customary fees will be paid. These fees are based on computerized profiles which have been developed in this State on the basis of railroad experience mostly and profiles based on Title XIX claims are being developed. One-half of the bills will be paid on the 10th of each month and one-half on the 25th. Therefore, each doctor will be paid once a month, with an itemized statement as to what bills are being paid. Bills are to be submitted daily. In reply to a question by Dr. Tanner, it was pointed out that when Travelers Insurance Company cuts a bill for payment, the doctor will be notified. If there is any disagreement concerning the amount that is paid, there will be several courses of action available. In the first place, Travelers claim personnel will make every effort to discuss the matter with the physician and resolve any misunderstanding. If that is unsuccessful, the problem may be referred to the local Medical Consultant of the State Welfare Department and the Consultant will make every effort to resolve the controversy. If the local Consultant is not able to resolve the misunderstanding, then a committee from the State Medical Association may be agreeable to being a final resort for controversies relating to fees.

Dr. Rivers, State Director of Public Welfare, then discussed ID cards and emphasized that the number and name thereof must be noted on the bills rendered. ID cards are being issued to each one of the families receiving cash assistance and the recipient is listed on the left hand side and the spouse, if it is an adult category, will be listed on the right hand side and there is certain identifying information on that particular person shown on that card. It is in figures and if the ID card shows that the recipient of the check is the wife, show her number. It may be 03 and two or four more figures. Show that on your bill. If it is the other one, the spouse, show the number following his name. Families with dependent children will have ID cards showing the caretaker, which is the mother in most instances, on the left hand side and on the right hand side, there may be six or seven children listed. Each one of those children will be listed and will show birthdates and you must show those numbers following their names in making your bill, as well as the ID number. For the time being, if a patient has an ID card, it will be honored.

Replying to a question by Dr. Atwill, Dr. Rivers stated that if a patient is over 65, both his case number (ID number) and Social Security number should appear on the bill, and the bill should be submitted for the time being to the Department of Public Welfare. Bills for patients under 65 should be submitted directly to the Travelers Insurance Company.

There must be no direct billing. Later on, when the program is extended to the medically indigent, it will be permissible to bill direct. When a person is eligible under XVIII and XIX, only the drug bill will be paid by Medicaid.

On office calls, only Form 1490W will be necessary to submit.

When admitting a patient to a hospital, it will be necessary for the doctor to certify that hospitalization is necessary.

If a patient cannot write, have someone witness his mark.

Dr. Rivers requested that meetings be set up between him and doctors over the State. To set up a meeting, contact Dr. Rivers at P. O. Box 1520, Columbia, South Carolina 29201.

Dr. Rivers also requested that a committee of doctors be appointed to meet with him, preferably in the Columbia area. The committee appointed was Dr. D. Strother Pope, Chairman, Dr. Waitus O. Tanner, and Dr. C. Tucker Weston. This committee is to work closely with Dr. Harriet Pinner, Liaison Representative between SCMA and the Department of Public Welfare. The purpose of this committee is to prepare a Physician's Manual for Title XIX.

Dr. Rivers explained that due to the lack of funds, it was not intended to include all drugs in the drug formulary. He stated that he would be glad to have suggestions from physicians for additional deletions, additions, or other changes. Further meetings will be held to expand the drug formulary. Dr. John D. Gilland of Council was added to this committee.

Adjournment.

D. Strother Pope, M.D., Secretary

COMMITTEES OF THE HOUSE OF DELEGATES SOUTH CAROLINA MEDICAL ASSOCIATION

Year 1968-1969

COMMITTEE ON SCIENTIFIC PROGRAM:
Dr. Walter M. Bonner, Jr., Chairman, Charleston
Dr. J. K. Owens, Jr., Bennettsville
Dr. B. Owen Ravenel, Charleston
Dr. Edwin R. Wallace, III, Barnwell
Dr. John C. Hawk, Jr., Charleston
Dr. James S. Garner, Jr., Mullins
Dr. Dana C. Mitchell, Jr., Columbia

COMMITTEE ON LEGISLATIVE ACTIVITIES:
Dr. Donald G. Kilgore, Jr., Chairman, Greenville
Dr. Strother Pope, Columbia
Dr. Henry L. Laffitte, Allendale
Dr. Hugh H. Wells, Seneca
Dr. Michael F. Patton, Spartanburg
Dr. Harold S. Pettit, Charleston
Dr. Joseph P. Cain, Jr., Mullins
Sub-Committee:
Committee on Coroners—Medical Examiners
Dr. E. Arthur Dreskin, Chairman, Greenville
Dr. Gordon Henniger, Charleston
Dr. Kenneth Ayeock, Columbia
Dr. D. Strother Pope, Columbia
Dr. Joseph Converse, Greenville

COMMITTEE ON COOPERATIVE ACTIVITIES:
Dr. Harold P. Hope, Chairman, Union
Dr. C. Benton Burns, Sumter
Dr. Judson E. Hair, Clemson
Dr. Robert S. Solomon, Moncks Corner
Dr. William C. Cantey, Columbia
Dr. Vince Moseley, Charleston
Dr. William T. Hendrix, Spartanburg
Sub-Committees:
Advisory Committee to the Department of Public Welfare
Committee on Alcoholism and Drug Addiction
Committee on Religion and Medicine
Advisory Committee to Vocational Rehabilitation
Committee on Medical Aspects of Sports
Committee on Medical Education Foundation (AMA-ERF)
Advisory Committee to the Woman's Auxiliary
Advisory Committee to Crippled Children's Society
Committee on Liaison with Allied Professions
Committee on Eye Bank
Committee on Liaison with Nursing Education

COMMITTEE ON MEDICAL EDUCATION:
Dr. Thomas E. Hair, Jr., Chairman, Columbia
Dr. J. Harvey Atwill, Orangeburg
Dr. Richard S. Pollitzer, Spartansburg
Dr. William A. Klauber, Greenwood
Dr. Dale Groom, Charleston
Dr. William H. Hunter, Clemson
Dr. John P. Booker, Walhalla
Sub-Committees:
Committees on Careers in Medicine

COMMITTEE ON MEDICAL SERVICES:
Dr. A. Izard Josey, Chairman, Columbia
Dr. Hugh H. DuBose, Columbia
Dr. Martin M. Teague, Laurens
Dr. Edmund R. Taylor, Columbia
Dr. Roland K. Charles, Jr., Columbia
Dr. Wyman King, Batesburg
Dr. Charles H. Banov, Charleston
Dr. James S. Garner, Jr., Mullins
Dr. C. Birnie Johnson, Orangeburg
Dr. Guy C. Heyl, Jr., Aiken
Sub-Committees:
Committee on Emergency Medical Care

Committee on Accident Prevention
Committee on Insurance Programs

COMMITTEE ON MENTAL HEALTH:
Dr. James B. Galloway, Chairman, Columbia
Dr. R. R. Mellette, Jr., Charleston
Dr. Michael Holmes, Kingstree
Dr. Joseph J. Nanarello, Greenville
Dr. William S. Hall, Columbia
Dr. A. L. Agardy, Greenwood
Dr. Robert G. Mann, Easley
Sub-Committees:
Committee to Work with Government Agencies on Mental Retardation

COMMITTEE ON PUBLIC RELATIONS:
Dr. Joseph I. Waring, Chairman, Charleston
Dr. Robert S. Solomon, Moncks Corner
Dr. Joel W. Wyman, Anderson
Dr. Ralph P. Baker, Newberry
Dr. Winston Y. Godwin, Cheraw
Dr. John R. Timmons, Columbia
Dr. H. Biemann Othersen, Jr., Charleston
Sub-Committees:
Public Information Committee
Dr. Joseph I. Waring, Chairman, Charleston
Dr. Leon Banov, Sr., Charleston
Dr. J. Decherd Guess, Greenville
Dr. John P. Manos, Charleston
Dr. Willard B. Mills, Greenville
Dr. John M. Preston, Columbia

COMMITTEE ON INDUSTRIAL MEDICINE:
Dr. J. Hal Jameson, Chairman, Easley
Dr. George V. Rosenburg, Abbeville
Dr. Joseph L. Goodman, N. Charleston
Dr. H. Leon Poole, Spartanburg
Dr. Allen R. Slone, Hartsville
Dr. Dexter M. Evans, Jr., Lake City
Dr. Rufus K. Nimmons, Jr., Seneca

COMMITTEE ON MATERNAL HEALTH:
Dr. Edward J. (Bill) Dennis, Chairman, Charleston (1962)
Dr. Herbert M. Black, Columbia
Dr. Harrison L. Peebles, Estill
Dr. William W. King, Jr., Newberry
Dr. Samuel B. Moyle, Walhalla (1962-1967)
Dr. James C. Brice, Jr., Easley
Dr. R. H. Hand, Anderson
Dr. Hilla Sheriff (State Board of Health, Columbia)

COMMITTEE ON INFANT AND CHILD HEALTH:
Dr. Casper E. Wiggins, Chairman, Greenwood (1962-1965)
Dr. William P. Bennett, Columbia
Dr Kemper D. Lake, Whitmire (1962-1965)
Dr. Robert E. Holman, Elloree
Dr. Samuel P. Fleming, Spartanburg (1964-1967)
Dr. Marion Caughman, Orangeburg
Dr. Jack W. Rhodes, Charleston (1963-1966)
Dr. Girard C. Rippy, Jr., Anderson (1963-1966)
Dr. Frank R. Huff, St. Matthews (1963-1966)
Dr. Hilla Sheriff (State Board of Health), Columbia
Sub-Committee:
Committee on School Health

MEMORIAL COMMITTEE:
Dr. J. Richard Sosnowski, Chairman, Charleston
Dr. Clay W. Evatt, Charleston
Dr. Samuel O. Cantey, Jr., Marion

COMMITTEE ON HISTORICAL MEDICINE:
Dr. Joseph I. Waring, Chairman, Charleston
Dr. William C. Herbert, Jr., Spartanburg
Dr. Leon Banov, Jr., Charleston
Dr. J. Richard Allison, Jr., Columbia
Dr. Richard Pollitzer, Greenville

COMMITTEE ON CONSTITUTION AND BY-LAWS:
Dr. Clay W. Evatt, Chairman, Charleston
Dr. George G. Durst, Sullivans Island
Dr. Swift C. Black, Dillon
Dr. Wallis D. Cone, Sumter
Dr. William A. Wallace, Spartanburg
Dr. William H. Hunter, Clemson
Dr. J. Gavin Appleby, St. George

MEDIATION COMMITTEE:
Dr. R. G. Latimer, Chairman, Cayce, 2nd District
Dr. John W. Rheney, Jr., Sec'y., Orangeburg, 8th District
Dr. Robert S. Solomon, Moncks Corner, 1st District
Dr. E. Gordon Able, Newberry, 3rd District
Dr. Donald G. Kilgore, Jr., Greenville, 4th District
Dr. Max A. Culp, Fort Mill, 5th District
Dr. Swift C. Black, Dillon, 6th District
Dr. Marion Davis, Manning, 7th District
Dr. W. A. Wallace, Spartanburg, 9th District

BENEVOLENCE FUND COMMITTEE:
(Elected by House of Delegates, SCMA) 3-year term
Dr. Ripon W. LaRoche, Chairman, Camden
Dr. V. Wells Brabham, Jr., Orangeburg
Dr. Clay W. Evatt, Jr., Charleston

STATE BOARD OF NURSING EXAMINERS
(Appointed by Governor) 5-year appointments
Dr. J. Richard Allison, Columbia (Replace Dr. Jowers)
Dr. Charles R. Holmes, Columbia

HOSPITAL ADVISORY COUNCIL TO THE STATE BOARD OF HEALTH
(Appointed by Governor) 4- year appointments
Dr. Thomas C. McFall (Reappt.), Charleston
Dr. Ralph P. Baker, Newberry
Dr. B. J. Workman, Sr., Woodruff

MEDICAL ADVISORY BOARD OF THE SOUTH CAROLINA INDUSTRIAL COMMISSION
(2-year term)
Pathologists:
Dr. Edward E. McKee, Charleston
Dr. Hunter W. May, Greenwood
Dr. D. James Greiner, Florence
Radiologists:
Dr. Hyman H. Addlestone, Charleston
Dr. Henry E. Plenge, Spartanburg
Dr. J. Harvey Atwill, Jr., Orangeburg
Physicians:
Dr. Waitus O. Tanner, Columbia
Dr. William W. Edwards, Greenville
Dr. C. Tucker Weston, Columbia
Member at Large:

Dr. Shepard N. Dunn, Columbia

STATE BOARD OF MEDICAL EXAMINERS OF SOUTH CAROLINA

(Appointed by Governor) 4-year appointments

Dr. A. Richard Johnston, St. George, 1st District
Dr. Kirby D. Shealy, Columbia, 2nd District
Dr. William P. Turner, Greenwood, 3rd District
Dr. Charles N. Wyatt, Greenville, 4th District
Dr. Roderick Macdonald, Rock Hill, 5th District
Dr. Harold S. Gilmore, Nichols, 6th District
Dr. Harold E. Jervey, Jr., Columbia, Member at Large
Dr. William O. Whetsell, Orangeburg, Member at Large

TUBERCULOSIS CONTROL ADVISORY COMMITTEE: (State Board of Health)

2-year appointment (By Governor)

Dr. E. Alex Heise, Sumter

ACTIVE COMMITTEES—Appointed by Council 1968-1969

Investment Committee (Different from 1967-1968)

Dr. Howard Stokes, Florence
Dr. Harvey Atwill, Orangeburg
Dr. Norman Eaddy, Sumter
Dr. Harrison Peeples, Estill
Dr. Joel Wyman, Anderson
Mr. M. L. Meadors—Ex-officio, Florence

Advisory Committee to SCALPEL

Dr. Harvey Atwill, Orangeburg
Dr. Joel W. Wyman, Anderson
Dr. Howard Stokes, Florence

Ad hoc Committee on Organ Transplants

(Appointed by Dr. Eaddy, Voted by Council May, 1968 to be on a permanent basis)

Dr. Dan W. Ellis, Charleston
Dr. Curtis P. Artz, Charleston
Dr. Arthur V. Williams, Charleston
Dr. Peter C. Gazes, Charleston
Dr. H. Biemann Othersen, Jr., Charleston

Committee to serve with Pharmaceutical Members on Category of Illnesses and Drugs

Dr. Robert Brownlee, Greenville
Dr. James B. Galloway, Columbia
Dr. Hunter Rentz, Columbia
Dr. Berryman E. (Ted) Coggeshall, Cheraw
Dr. Ira B. Horton, Orangeburg
Dr. Donald Saunders, Columbia
Dr. William W. Vallotton, Charleston
Dr. John D. Gilland, Conway

COMMITTEE ON COOPERATIVE ACTIVITIES—Sub-Committees

Committee on Liaison with Nursing Profession:

Dr. Lawrence Jowers, Chairman, Columbia
Dr. Eddie Parker, Charleston
Dr. J. Decherd Guess, Greenville

Committee on Mental Retardation:

Dr. B. Owen Ravenel, Chairman, Charleston
Dr. Frank Wrenn, Greenville
Dr. Bruce Ford, Spartanburg
Dr. Louis P. Jervey, Charleston
Dr. Roy Suber, Clinton
Dr. Robert Brownlee, Greenville

Advisory Committee to Crippled Children's Society:

Dr. Joseph I. Waring, Chairman, Charleston
Dr. Francis I. Doyle, Georgetown
Dr. Clark S. Collins, Greenville
Dr. William Weston, III, Mt. Pleasant
Dr. Julian Price, Florence
Dr. C. Guy Castles, Columbia
Dr. John E. Keith, Spartanburg
Dr. O. B. Mayer, Columbia
Dr. William Weston, Jr., Columbia
Dr. Angus Hinson, Rock Hill
Dr. F. A. Kennedy, Aiken
Dr. William A. Klauber, Greenwood
Dr. Walter J. Roberts, Columbia
Dr. George Dean Johnson, Spartanburg
Dr. Joel Wyman, Ex-Officio, Anderson

Committee on Medical Aspects of Sports:

Dr. Judson E. Hair, Chairman, Clemson
Dr. E. M. Lunceford, Jr., Columbia
Dr. Edward L. Proctor, Conway
Dr. Sam Garrison, Johnston
Dr. Hames L. Hughes, Chester
Dr. W. R. Henderson, Spartanburg
Dr. C. C. Wannamaker, N. Charleston

COMMITTEE ON COOPERATIVE ACTIVITIES: SUB-COMMITTEES:

Advisory Committee to Womens Auxiliary:

Dr. Peter Gazes, Charleston
Dr. David D. Moise, Sumter
Dr. George Dean Johnson, Spartanburg
Dr. Owen Ravenel, Charleston
Dr. Charles H. White, Sumter
Dr. Frank C. McLane, Ware Shoals
Dr. C. Benton Burns, Sumter
Dr. Thomas Parker, Greenville

Committee on Alcoholism & Drug Addiction:

Dr. Robert S. Soloman, Chairman, Moncks Corner
Dr. Donald L. Duerk, Myrtle Beach
Dr. Joseph Marshall, Charleston
Dr. Hunter Rentz, Columbia
Dr. Harold W. Moody, Spartanburg

Committee on Eye Bank:

Dr. John H. Young, Chairman, Columbia
Dr. David Asbill, Jr., Columbia
Dr. Joseph O. Beasley, Spartanburg
Dr. James H. Gressette, Orangeburg
Dr. Clay Evatt, Jr., Charleston

Committee on Religion and Medicine:

Dr. N. B. Baroody, Chairman, Florence
Dr. Samuel O. Cantey, Jr., Marion
Dr. Norman Eaddy, Sumter
Dr. Walter Masters, Columbia
Dr. John May, Bennettsville
Dr. Elbert Johnson, Columbia

Committee on Liaison with Allied Professions:

Dr. J. W. Blanton, Chairman, Charleston
Dr. W. McGill Woodward, Charleston
Dr. Patrick H. Dennis, Charleston



Dr. William H. Cain of Charleston has announced the relocation of his office to Charleston Medical Center, 315 Calhoun Street. His practice is limited to surgery. **Dr. Nicholas K. Moore** of Columbia has opened his office at 1609 Brabham Avenue. His practice will be limited to treatment of clinical allergy. Dr. Moore was graduated from the Medical College of South Carolina and served his internship and residency at Union Memorial Hospital, Baltimore. He was a fellow in clinical allergy at Johns Hopkins Hospital and also served at the U. S. Naval Hospital at Bethesda. **Dr. W. Carl Walsh Jr.** has begun the practice of medicine in Easley in partnership with **Dr. Dexter B. Rogers.** He was graduated from the Medical College of South Carolina and served his internship at Greenville General Hospital.

Dr. R. T. Whitehead has been elected president of the medical staff of the Lower Florence County Hospital. **Dr. William C. Marett** has been named chief of cancer and heart disease control at the S. C. Board of Health. He is a graduate of The Citadel and the Medical College of South Carolina. **Dr. John R. Paul Jr.** has been appointed director of the Vince Moseley Diagnostic and Evaluation Clinic, a division of the S. C. Retarded Children's Habilitation Center in Charleston. He has replaced **Dr. Allan D. Lieberman** who has been named director of clinical services at the Summerville Habilitation Center. A native of Seneca, **Dr. Michael Anthony Sisk,** has been awarded a residency fellowship in pediatrics by Wyeth Laboratories. Dr. Sisk is serving his first year of residency at the N. C. Baptist Hospital, Winston-Salem.

Dr. James R. Young of Anderson, who was one of the founders of the American Cancer Society's state organization in South Carolina, was elected president emeritus of the S. C. Division at a recent meeting of its board of directors. **Dr. William E. Jett** has joined the physician's service for the emergency room at Greenville General Hospital. Dr. Jett was graduated from the Medical College of South Carolina and has lived in Greenville for 10 years, where he has engaged in general practice with offices in San Souci. **Dr. Joel W. Wyman**, president of SCMA, was guest speaer at a meeting of the executive board of the Woman's Auxiliary in September. **Dr. John Jackson** has joined the practice of internal medicine in association with **Drs. William R. Craig, C. W. Harper, H. G. Howe Jr. and J. K. Dixon** at 24 Vardry Street, Greenville. He is a graduate of the Medical College of South Carolina. **Dr. William B. Stocking** has opened an office at 7722 N. King's Highway, Myrtle Beach, for the practice of general medicine.

Dr. Charles W. Simmons has announced the opening of his office at 126½ Rutledge Avenue, Charleston for the practice of internal medicine. **Dr. George P. Graf,** specialist in internal medicine, has been named resident physician and medical director of the hospital at Bob Jones University. He received his medical degrees from the University of Wisconsin and has spent three years on a fellowship in internal medicine at the Mayo Clinic. S. C. Board of Health has announced the appointment of **Dr. J. E. Padgett** of Ridgeland as assistant director of the Personal Health Service Bureau. He joined the bureau after private practice in Aiken.

Dr. John S. Floyd III has opened his office at Medical Arts Building, 65 Gads-

den St., Charleston, for the practice of obstetrics and gynecology. **Dr. Lee J. Knight** has opened his office in the Gilbert Building, 3962 Rivers Avenue, Charleston Heights, for the practice of pediatrics. **Dr. Henry C. Heins Jr.** and **Dr. Thomas G. Herbert Jr.** have announced the association of **Dr. Wilson B. Rumble** for the practice of obstetrics and gynecology at 59 Bee Street, Charleston. **Dr. Arno R. Hohn** of Charleston has been elected the first president of the Southeastern Society of Pediatric Cardiology. **Dr. Forde McIver** of Charleston, will enter the private practice of pathology in Charleston in January 1. **Dr. G. Lynn Derrick** of Columbia will serve a two-month voluntary tour aboard the hospital ship S. S. Hope in Colombo, Ceylon. Dr. Derric is a specialist in ophthalmology.

MEETINGS

The Southern Medical Association will hold its 62nd annual meeting in New Orleans November 18-21.

For more information write: Southern Medical Association, 2601 Highland Avenue, Birmingham, Ala. 35205.

The Third Annual Radiotherapy Symposium of the University of Miami School of Medicine will be held January 23-25, 1969, at the Sheraton-Four Ambassadors Hotel, Miami, Florida. This postgraduate seminar will be co-sponsored by Dr. Victor Politano, Professor and Chief of the Division of Urology. Basic theme will be diagnosis and management of genitourinary tumors, including pediatric GU tumors. Included in the subjects to be covered are 1) carcinoma of the kidney, 2) advances in treatment of the urinary bladder, 3) consideration of preoperative irradiation of cancer of the prostate, and 4) management of GU tumors in infants.

For additional information write to Mario Vuksanovic, M.D., Director, Radiation Therapy Division, Jackson Memorial Hospital, 1700 N. W. 10th Avenue, Miami, Florida 33136.

The American Heart Association's 41st Scientific Sessions will be held November 21-24 in the Americana Hotel, Bal Harbour, Florida.

The Association's Annual Meeting will follow the Scientific Sessions and is scheduled for November 24-26. For more information, write: the American Heart Association, 44 East 23 Street, New York, N. Y. 10010.

Specialists in internal medicine in North Carolina will hold a scientific meeting in Greensboro, N. C., Dec. 5-7, under the auspices of the American College of Physicians (ACP).

Special guest at the meeting will be H. Marvin Pollard, M.D., Ann Arbor, Mich., ACP President. Dr. Pollard is Professor of Internal Medicine at the University of Michigan Medical School and Head of the Section of Gastroenterology at the University of Michigan Medical Center. Also attending will be Edward C. Rosenow, Jr., M.D., Philadelphia, Pa., Executive Director of the College.

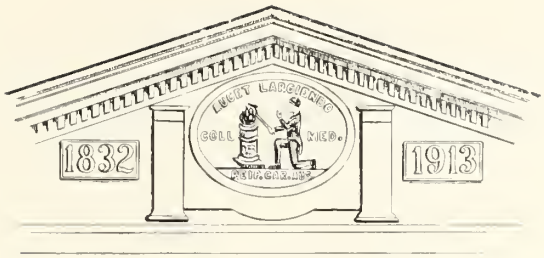
The meeting is under the general direction of Joseph B. Stevens, M.D., Greensboro, N. C. ACP Governor for North Carolina and Chief of Neurology at Wesley Long Community Hospital.

The Seventh District Medical Association met September 19 at Goat Island Restaurant, south of Manning, S. C.

Doctors from the five counties in the district attended as well as 20 others from Charleston and Columbia.

Newly elected officers include Dr. Herman Deny, president; Dr. Marion Davis, secretary; and Drs. C. E. Coker Jr., Lee Morrison, Leon Hunt, Jack Rowe and Howard Poston, vice presidents.

The association will meet next September with the Lee County Medical Society as host.



Medical College of South Carolina

Two new schools and vastly expanded numbers of students in the health professional schools and allied health sciences are the goals contained in a Master Plan for Expansion released by the Medical College of South Carolina.

Dr. William M. McCord, president of the Medical College of South Carolina said, "The need for more health scientists in South Carolina is acute. We see the solution of this problem as one of our primary responsibilities as the state's major health educational institution."

Dr. McCord said, "Our Planning Committee has reached into the faculties of all six of our existing schools and coordinated into a logical, comprehensive Master Plan the best thinking of all of our health educators."

The plan calls for doubling the size of the student bodies of the schools of Medicine, Dentistry, and Pharmacy. The student body at the School of Nursing would triple to 150 in the entering class. The School of Graduate Studies would also triple its student body, and the School of Allied Health Sciences would increase its number eight-fold. Medicine would have 160 in the entering class, Dentistry 75, and Pharmacy 70 if the present school remains in operation at the University of South Carolina.

Internships and residencies in the medical and dental specialties would triple in number to 335 such postgraduate medical study positions.

The two new schools proposed are a School of Public Health and Veterinary Medicine. Dr. McCord said, "The sophistication of community health practice, not only in medicine but also in related fields during recent years, has placed an extreme demand upon existing schools of public health. The need, therefore, for such a school at the Medical College of South Carolina can be supported. Only two such schools now exist in the southeastern United States." It is planned for this school to start in 1975 with twenty students in the entering class and building to a total enrollment of 100 students by 1980.

The School of Veterinary Medicine is slated to begin in 1973 with 40 freshmen students, expanding to a total enrollment of 240 students by 1980.

The total enrollment at the Medical College of South Carolina is anticipated to reach 3,350 by 1980.

Total additional square footage required for all programs is 1,485,360 by 1980. At current construction prices this will mean an investment of $59,414,400. These figures do not include two 500 car, high-rise parking buildings, which would cost an estimated 2.5 million dollars.

"We anticipate that future needs for dormitory space can be provided by private investors under contract with the Medical College," Dr. McCord said.

Some of the physicial plant facilities called for are a new clinical care building, 150,000 square feet; research and graduate teaching area for basic scientists, graduate school administration, and vivarium, 150,000 square feet; School of Dentistry research and graduate training in the dental specialties, 57,000 square feet; a 200-bed childrens' hospital annex with an additional 25 beds in pediatric

psychiatry, 150,000 square feet; new nursing school teaching areas including a Master's Degree program, 57,000 square feet; and a new School of Pharmacy, which will include Master's and Doctor of Philosophy degree programs, 49,000 square feet.

Allied Health Sciences instructional and laboratory space will be expanded throughout the system.

A 40,000 square foot continuing education center also is planned.

The School of Public Health will require 75,000 square feet of teaching and administrative space.

The proposed School of Veterinary Medicine will occupy 235,000 square feet for teaching and laboratory space on and off the main Medical College campus. Some one hundred acres of land will be acquired to house small and large animal facilities plus a small dormitory for students and staff.

"Faculty expansion will be extensive in all schools in order to maintain an acceptable faculty—student ratio," Dr. McCord explained.

"We can," continued Dr. McCord, "with this plan, which is under continuing study and development, expect to obtain considerable private and federal support for these valuable and necessary programs and projects if we get adequate support from the General Assembly of South Carolina. I am confident this support will be forthcoming as needed in view of the excellent support we have been receiving from those in the General Assembly."

The Medical College of South Carolina is offering a course for biomedical engineers covering anatomy, physiology, and the problems of patient care.

For several years, medically oriented companies have shown great interest in such a program, and after much investigation, the Department of Surgery decided to offer one July 5-Aug. 2, 1968.

Under the direction of **Dr. Curtis P. Artz**, Chairman of the Dept. of Surgery, and **Thomas S. Hargest**, Director of Engineering, the course offered the engineers a unique opportunity to observe firsthand hospital procedures and operations. The program included the following: physiology and anatomy lectures; observation and limited participation in operating and emergency rooms, intensive and cardiac care units, and central supply; training and service in general, orthopedic and neurosurgery wards and internal and physical medicine wards. Seminars concerning technical problems of their specialties were conducted by members of the faculty.

According to Dr. Artz, Hargest, and the engineers, the real benefit to be realized from such a course is the development of new products brought about by a better understanding of hospital problems and procedures. Judging from student response, the program has been a successful one which the Medical College hopes to continue on an annual basis.

Dr. Louis P. Jervey has resigned as associate Dean and Chairman of the Admissions Committee at the Medical College and will devote his entire time to his position as Associate Professor of Medicine.

Dr. C. Capers Smith, assistant professor of neurology at the Medical College of South Carolina, has been named director of the department of neurology at Broughton Hospital in Morganton, N. C.

He will also be a consultant neurologist for the Western North Carolina Region for mental health and will help organize a foundation to aid in the understanding of and help for epileptics.

Dr. Smith was first associated with the Medical College as an instructor in medicine in 1946. He took a leave of absence from 1954-57 to take his residency in neurology at the University of North Carolina Medical School and to study in London, England.

On his return to the Medical College, he served as an associate in neurology un-

til 1959 when he became an assistant professor.

He has also been director of the seizure clinic at the Medical College since 1957.

He is a graduate of the College of Charleston and the Medical College. He served as a battalion surgeon with the rank of major from 1942-45 and entered private practice with his father, Dr. W. Atmar Smith, in 1946.

He was one of the founders of the S. C. Epilepsy Foundation whose purpose is to educate the public about what epilepsy is and teach them to accept the epileptic as a responsible member of society.

THE MONTH IN WASHINGTON

Medicaid Muddle

The American Medical Association protested strongly against proposed new medicaid regulations affecting payments to physicians and utilization review.

The proposed regulation on physicians' reasonable charges was described as an anomaly in a protest to the Department of Health, Education and Welfare.

In the protest filed with the Department of Health, Education and Welfare, the AMA termed the proposed regulation on physicians' "reasonable" charges as an anomaly because it is based on payments received with no consideration given to the usual and customary fee.

Since medicare payments made by the government are 80 per cent of the reasonable charge, this amount could become the maximum of every charge under medicare, the AMA said. Or, were physicians to receive less than full payment and write off losses, the reduced payments could become the basis for the reasonable charge under medicaid.

The new regulation on utilization review would require a state medicaid plan to provide for utilization review of each item of service, including a physician's in his office or the patient's home. The AMA said it could lead to a set of national standards with authorized treatment for each medical condition limited in a manner set by regulation.

The AMA said it is not opposed to a "claims review" process similar to that now in operation in many areas or as conducted under medicare. Nor, the AMA added, did it find fault with inquiring into a physician's conduct where fraud is alleged, or where it appears on the basis of medicare claims submitted, that there is reasonable ground for further investigation of a possible fraud.

In another development, the Advisory Commission in Intergovernmental Relations supported a medicaid goal of comprehensive health care for the needy and medically needy by 1975, but proposed changes in financing and operation of the federal-state program.

The report was directed particularly to "the virtually unmanageable fiscal burden imposed on state and local governments by the program." It urged that consideration be given to "broadening medicaid's financial base through increased involvement of the private sector through an employer-employee contributory health insurance system." If congress approved this proposal, it would be a giant step toward national compulsory government health insurance.

The commission rejected proposals to limit federal sharing in medicare and to establish national eligibility standards for beneficiaries.

The report was made public soon after the Senate voted a $500 million cutback in medicaid funds and when some states already were trimming their medicaid programs because of a financial pinch.

The commission recommended that the states "move vigorously to experiment with methods of increasing the efficiency and economy of health services under the medicaid program," including: (1) Reimbursing hospitals contingent on their operating under an acceptable standard of

management efficiency, (2) expanding prior authorization for elective surgical procedures, (3) payment for physicians' services on a basis other than usual and customary charges, (4) use of co-payments for the purchase of specified health care services, and (5) improved techniques of utilization review.

The 26-member Commission is a bipartisan body established by federal law in 1959 to maintain continuing review of the relations among federal, state and local governments. Its membership consist of governors, mayors, county officials, state legislators, and representatives of both houses of Congress, the federal executive branch, and the general public. The chairman is Farris Bryant, former governor of Florida.

* * *

Congress approved a two-year extension of the regional medical programs and a one-year extension of the Hill-Burton program of federal aid for construction of hospitals and other health care facilities.

The legislation authorizes appropriation of $65 million in this fiscal year, ending next June 30, and $120 million for the next year for the regional medical programs. The Senate had voted a three-year extension but it was dropped in a House-Senate conference which worked out the compromise.

House conferees, however, emphasized that "this program, although a new established one, has already proved its value and should be considered as a permanent program." They said they accepted the two-year extension to give the next congress an opportunity to review the program.

The Hill-Burton program was authorized $195 million for hospitals and $100 million for other health care facilities. The conferees abandoned Senate provisions for a new three-year program of federal loans of $200 million a year for hospital modernization and a guaranteed loan program of the same amount with a federal subsidy of interest. These provisions also were left for further consideration by the next Congress.

A total of $40 million was authorized for two years for construction and staffing of rehabilitation facilities for narcotics addicts and alcoholics. As a declaration of Congress, the measure states:

"Alcoholism is a major health and social problem afflicting a significant proportion of the public and much more needs to be done by public and private agencies to develop effective prevention and control."

The program of grants for family health service clinics for migratory agricultural workers was extended for two years with $9 million authorized for the current fiscal year and $15 million for the next year.

* * *

The Committee on Emergency Medical Services of the National Research Council has recommended establishment of a nationwide program for the training of ambulance personnel.

The committee proposed guidelines for such training, stating that there is at present "no uniformity in the course of instruction and . . . no generally accepted standards of proficiency to be used by those empowered to certify ambulance personnel."

The committee's recommended guidelines cover: either the standard or advanced first aid courses of the American National Red Cross as a prerequisite, the operation of emergency vehicles, safety precautions at the accident scene, priorities of care, records, the use of communication systems, the use of equipment and supplies, medicolegal problems, and rescue procedures.

The levels of proficiency designed to result from the course proposed in the report are attainable in most areas of the country within a reasonable time, the committee said. However, to realize the greatest life-saving potential, the ambulance attendant of the future should be trained to the same level as lay as-

sistants in emergency departments or medical corpsmen in combat areas; and, ideally he should be qualified to carry out, either independently or through voice communication with a physician, such procedures as tracheostomy, defibrillation, and mechanical external cardiac compression, the committee said.

To attain these goals, the committee said, accredited hospital training programs must be established that will produce professional ambulance attendants and emergency department assistants of the caliber of certified x-ray, laboratory, physical therapy, and other accredited medical technicians.

The ambulance attendant, it added, must be fully engaged in emergency care in an established career pattern that provides attractive compensation, prestige, and recognition deserving of his services as a member of the emergency care team. Where the needs for ambulance services are low so that he is not fully occupied, such as in small communities, he should be an employee of a hospital, where he can maintain his interest and proficiency as an assistant in the emergency department, intensive-care unit, or operating room the committee said.

Down's Syndrome Registry Established at Summerville Center

The first state-wide registry of Down's Syndrome (Mongoloid) babies has been established at the South Carolina Retarded Children's Habilitation Center in Summerville, (Ladson, S. C.) Dr. Allan D. Lieberman, Clinical Services Director of the Center, has announced.

An attempt has been made to contact all physicians in the state who care for infants and children to request their cooperation in voluntarily reporting the birth of babies with Down's Syndrome to the Center. The purpose of the registry is to identify all such babies for statistical and research purposes, and to enable the Center to provide counselling for parents, who are always in need of advice on the care and management of such babies.

Down's Syndrome, commonly known as Mongolism, is a chromosomal abnormality occuring in about 1 in every 600 babies born. It is estimated that about 80 such babies will be born in South Carolina this year. The syndrome is characterized by marked floppiness, mental retardation and a characteristic facial appearance.

According to Dr. Lieberman, our greatest hope in combating this type of mental retardation lies in research into its causes and the means of preventing it. The first step in such research is the identification and registration of all such babies.

New Members

Dr. William N. Adams-Smith
Med. College of S. C.
Charleston

Dr. Jesse J. Floyd
2757 Laurel St.
Columbia

Dr. William A. Hammill
385 Serpentine Dr.
Spartanburg

Dr. Cecil F. Jacobs
334 Calhoun St.
Charleston

Dr. Ronald V. Lanford
1704 Skylyn Dr.
Spartanburg

Dr. Norman S. Walsh
126½ Rutledge Ave.
Charleston

The Orangeburg County Mental Health Clinic, with a part-time consulting psychiatrist and a full-time psychatric social worker, has begun operations in offices in the Way Office Building at 304 St. John St., S. E.

With William L. Belvin Jr. as the full time psychiatric social worker and Dr. Arthur Africano as the consulting psychiatrist, the clinic will provide three services that mental health workers have long felt were badly needed.

THE SOCIAL SECURITY DISABILITY PROGRAM

How Recent Amendments Will Affect The Physician And His Patients

DILL D. BECKMAN*

Private praetitioners came under social seurity in 1965. In addition to earning retirement and survivors protection, they may also have earned disability protection. Work eredits eould have been aecumulated before 1965 through internships, residencies, military service and other eovered employment. This article diseusses the disability program, and how recent ehanges in the law affect the physieian and his patients.

If you pay—or if you have ever paid—social security contributions on your earnings, you and your family may be covered by the social security disability program.

In the disability program, a worker under 65 may be eligible for monthly payments if he is disabled because of a severe physical or mental impairment which has lasted (or is expected to last) a year or longer. He must be unable to do not only his usual job, but any work in keeping with his age, education, and experience.

The disability program was improved by legislation that became law early this year. As a result of an increase in benefits under the new social security amendments, monthly payments can amount to as much as $189.90 for a disabled worker and $395.60 for a family. In forthcoming years, maximum monthly benefits will be even higher.

To be insured for disability purposes, a person disabled when he is 31 or older needs to have worked under social security for at least 5 of the 10 years preceding the onset of disability. For younger workers, who may not have had the chance to work this long, the work requirement ranges down with age to as little as 1½ years of work credits.

Under the new amendments, an additional group of people—disabled widows (including certain surviving divorced wives) and disabled dependent widowers of insured workers—can become eligible for reduced benefits at 50 or older, even though they themselves never worked. The disability must occur before or within 7 years after the spouse's death—or, in the case of a widow caring for a child entitled to benefits, within 7 years after her benefits as a mother end. Note: Factors such as age, education and previous work experience are not considered in deciding whether a widow is disabled (as they may for a disabled worker).

Benefits begin with the 7th full month of disability. (A 6-month waiting period is required by law.) Payments can last as long as the disability continues. At 65, payments to disabled workers are converted into retirement benefits without any change in amount.

Helping Your Patients

Many physicians routinely advise any patient who they think might qualify for disability benefits to consult his social security office. Such advice can be a great service to the patient. Since disabled patients are often having financial difficulties, your suggestion that they file may result in their getting urgently needed funds.

The people in any social security office can tell a claimant what the eligibility requirements are and can help him apply for benefits. If a person is unable to come to the office because he is homebound or hospitalized, a social security representative can arrange to visit him.

Up to the present the most frequent causes of disability have been arterio-

*Director, S. C. Vocational Rehabilitation Department 400 Wade Hampton State Office Building Columbia, South Carolina 29201.

sclerotic and hypertensive heart disease, emphysema, schizophrenic disorders, pulmonary tuberculosis, rheumatoid arthritis and osteoarthritis. Currently in South Carolina about 22,700 disabled persons—plus about 19,731 dependents—receive about $2,851,961 a month in benefits under the social security disability program.

Reporting Data

When a patient applies for disability benefits, he is expected to furnish reports from his treatment sources for use in evaluating his claim for disability benefits.

Disability decisions under the social security program are made by an evaluation team consisting of a physician and a lay disability evaluation specialist. The team works in an agency of the State in which the applicant lives—in South Carolina, at the Vocational Rehabilitation Department.

Typically, the evaluating physician is a private practitioner serving the agency on a part-time basis. He reviews the reports from physicians and hospitals and, in conjunction with the non-medical member of the team, decides whether the applicant's impairment is disabling under the law. The evaluating physician neither sees nor examines the patient. He depends entirely on the evidence reported by you and others who have examined or treated the applicant.

Experience has shown that the extent of a patient's disability can be determined largely on evidence from his own physician's records. By giving a detailed report of objective data in your files, you can help speed the decision on your patient's claim. On the other hand, long delays can result if the physician responsible for evaluating the evidence must write back to you or seek from other sources medical information about symptoms, signs and laboratory findings that you may already have in your files.

To be most helpful, report the same information that you would send any colleague to give him a complete medical picture of the patient. This report should contain not only a diagnosis, but also a complete history, results of physical examination and relevant diagnostic tests.

You may wish to save time in preparing the report by enclosing photocopies of pertinent portions of the patient's chart, including laboratory reports, electrocardiograms, x-ray films and the like. Originals are welcome and will be promptly returned if requested. Under the law, your patient—not the Government—is responsible for providing the initial medical evidence in support of his claim.

Sometimes more medical evidence is needed for an evaluation than is available in the patient's chart. In this situation, the physician evaluating the claim may ask you to perform the needed tests and examinations at Government expense, or he may find it necessary to refer the patient for an independent consultative examination, also at Government expense. When the latter is done, the consultant's report can be sent to you if you wish.

"Childhood Disability"

In addition to covering disabled workers and disabled widows, the social security program has a provision for "childhood disability" benefits—a somewhat anomalous title since these benefits are paid after the person reaches 18. Ordinarily, children cannot get social security benefits as dependents after reaching 18 unless they are full-time students, and then only until they reach 22. But under the childhood disability provisions, a person continuously disabled since before reaching 18 can be eligible for benefits after he reaches 18.

Childhood disability benefits are payable when the beneficiary's parent covered under social security dies or becomes entitled to retirement or disability benefits. Benefits can continue as long as the "child" lives if he remains disabled. He need not himself have worked under social security.

Since 1957 the childhood disability pro-

gram has awarded monthly benefits to nearly 300,000 persons too handicapped to be self-supporting. Over 65 per cent of beneficiaries under this program suffer from some form of mental deficiency. Other prevalent conditions of beneficiaries under the program include cerebral palsy, schizophrenic disorders and epilepsy.

Motivating Rehabilitation

In addition to paying cash benefits, one of the main goals of the disability program is to help restore as many applicants as possible to gainful work. At the time your patient's claim is being evaluated, he is also being considered for possible services by South Carolina Department of Vocational Rehabilitation. Such services—which include medical rehabilitation, counseling, teaching of new employment skills, training in the use of prostheses and job placement—are usually financed from State-Federal appropriations.

Additional resources are also provided through social security trust funds to pay the costs of rehabilitating certain disability beneficiaries. This should save social security money because in the long run the cost of rehabilitating beneficiaries is less than the expense of paying them benefits.

As the patient's physician, you are in a good position to reinforce his interest in returning to productive work, if this is feasible. Incorporated in the social security disability program are several incentives for rehabilitation that doctors often cite to help motivate patients.

For instance, a worker on the disability rolls who returns to work despite a severe impairment may continue to get monthly benefits for as long as a year while he tries to re-establish himself as self-supporting. If at the end of this period he shows himself able to work, benefits stop. Benefits continue, however, if his attempt is unsuccessful. This helps overcome the anxiety of a beneficiary who fears all income will be cut off if he fails in his attempt to work.

As a further incentive, former beneficiaries who have recovered or returned to work get special consideration should they again become disabled. If disability recurs within 5 years (7 years for widows), they need not go through another 6-month waiting period before benefits resume.

SOCIAL SECURITY DISABILITY PROVISIONS AT A GLANCE

Benefits go to disabled workers under 65 and their dependents.

A disabled worker needs credit for a certain amount of work under social security. If he is disabled before age 31, he can now be eligible for benefits with credit for fewer years of work than before.

Widows and dependent widowers who are 50 or older can receive reduced benefits based on disability, if the spouse was covered under social security.

Persons handicapped continuously since before 18 may get benefits under the "childhood disability" provisions when a parent covered under social security dies or becomes entitled to retirement or disability benefits.

Benefits are payable if the disability has lasted, or is expected to last, 12 months or longer or result in death.

Benefits generally begin with the 7th full month of disability.

Benefits for a worker are the same amount that retirement benefits would be if he were 65. All applicants are considered for vocational rehabilitation services.



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DEATHS

Dr. Ingram Carpenter Taylor

Dr. Ingram Carpenter Taylor, 63, a retired physician, of 711 South Ott Rd. died September 3 at the Veterans Hospital in Columbia.

Dr. Taylor was born in Milo, Iowa. He received his B.S. Degree from the Universityof Chicago, his M.D. degree from the State University of Iowa College of Medicine, and served his internship at Mercy Hospital in Des Moines, Iowa.

He was a member of the American Medical Association, Iowa State Medical Society, Fellow Emeritus of American College of Chest Physicians, American Thoracic Society of the National Tuberculosis Association, Reserve Officers Association of the United States, The American Legion, where he was an active member of the Boy Scout Committee Troop 39, The Medicine of the 40 & 8 Voiture Local No. 1025, and was a member of the nurses training committee and the National Association of Retired Civil Service Employees Columbia Chapter No. 87.

After serving for 10 years at Columbia Veterans Hospital he retired from the Veterans Administration.

Dr. Abraham Silver

Dr. Abraham Silver, a West Columbia physician, was found dead at his office September 24.

Dr. Silver practiced in Columbia for a number of years, moved to Florida, and then returned to West Columbia two years ago.

Dr. Matthew Steinberg

Dr. Matthew Steinberg, a Charleston physician, was pronounced dead on arrival at the emergency room at the Baptist Hospital in Columbia September 12.

Dr. and Mrs. Steinberg, of 34-D Smith St., were returning to Charleston from Atlanta when Dr. Steinberg became ill.

Dr. Steinberg, was born in Charleston, Dec. 11, 1908.

He was a 1928 graduate of the College of Charleston and first honor graduate of the Medical College of South Carolina in 1932.

Dr. Steinberg was a past president and member of the board of Synagogue Emanu-El.

Dr. Steinberg served on the executive board of Baker Hospital and was on the staffs of Roper Hospital, St. Francis Hospital and McClennan-Banks Hospital, as well as Baker Hospital.

His professional memberships included the American Medical Association, South Carolina Medical Association, Medical Society of South Carolina, Charleston County Medical Society, American Academy of General Practice, Southern Medical Association, Tri-State Medical Associatin, Medico-Chi Club, Coastal Medical Society ,and Widows and Orphans Society.

Dr. Steinberg had been a member of the board of the Charleston Jewish Community Center since it was organized in 1945. He also served on the board of the Charleston Jewish Welfare Fund.

He was a member of the Charleston Jewish Social Service Committee and volunteered his professional services to that group. He also was a member of the Hebrew Benevolent Society, organized in 1774 and the oldest charitable organization in the United States.

Prognosis and Treatment of Idiopathic Facial (Bell's) Palsy—D. Taverner, F. Kemble, and S. B. Cohen Brit Med J 4:581-583 (Dec 9) 1967.

The results obtained in the management of 381 consecutive patients with idiopathic infranuclear facial (Bell's) palsy of less than five days' duration are reported. Measurement of the threshold for anodal galvanic stimulation established the prognosis for recoverable conduction block with an accuracy of over 90%. Treatment with corticotropin gel intramuscularly was given to 216 patients. The results in the whole group of 381 patients show a reduction in the overall incidence of denervation by two thirds, and of severe denervation by 90%.

Book Reviews



SOUTH CAROLINA SILVERSMITHS 1090-1860, E. Milby Burton. Charles E. Tuttle Co., Rutland, Vermont, 1968. $7.50.

While South Carolina's early settlers sought in vain for the local silver which was suppose to abound, their descendents imported a considerable amount and a number of them devoted themselves very successfully to the manufacture of silver objects. With increasing prosperity there was much demand for fine silver coffee pots, tankards, sugar bowls, flatware, and the like. Two major wars account for the disappearance of much of the South Carolina silver.

Present prosperity among physicians may lead to increasing interest in the acquisition of fine pieces of silver. This book would certainly be a valuable tool for the collector. It is a meticulous piece of research on South Carolina silversmiths and serves as an excellent reference work for anyone interested in the subject. Its popularity is evidenced by the need for this second printing.

J.I.W.

THE SIDE OF THE ANGELS by John Rowan Wilson, Doubleday & Co., Inc., Garden City. $5.95.

Written by a physician, this is an absorbing and readable novel. Its principal figure is a scientist who is working in Russia, is entrusted by a colleague with vital scientific information which he feels should not be revealed to his superiors. His escape from the Soviet Union and his strugggle to preserve his scientific integrity in the face of commercial pressures in America make a story of suspense and power. This book should appeal especially to physicians.

J.I.W.

End Results in Cancer of the Breast—M. B. Shimkin Cancer 20:1039-1043 (July) 1967

It is very difficult to demonstrate improvement in the therapeutic results for cancer of the breast during the last 30 years. Comparison of statistics from different centers and overall data suggest that the prognosis has remained rather stable during this period; however, this should not lead to an attitude of therapeutic nihilism.

Cadaveric Renal Transplantation—P. Kincaid-Smith et al. Lancet 2:59-62 (July 8) 1967.

Twenty of 24 patients who received a cadaveric renal transplant over the past two years have satisfactory function in the grafted kidney. None of the 20 living patients received more than one graft. Stable renal function has been maintained in five of seven patients who received a graft over a year ago, and in 11 of 14 patients who received a graft over six months ago. Patients were prepared for grafting by means of Kiil dialysis according to the methods advocated for long-term hemodialysis. Cadaveric renal transplantation at present seems to offer a more practical solution to the treatment of chronic renal failure than recurrent hemodialysis.

New Pharmaceutical Specialties

by Paul De Haen

For detailed information regarding indications, dosage, contraindications, and adverse reactions, refer to the manufacturer's package insert or brochure.

Single Chemicals—Drugs not previously known, including new salts.

Duplicate Single Products—Drugs marketed by more than one manufacturer.

Combination Products—Drugs consisting of two or more active ingredients.

New Dosage Forms—Of a previously introduced product.

DUPLICATE SINGLE PRODUCTS

DYNAPEN

Antibiotic-Penicillin. Rx

Manufacturer: Bristol Laboratories

Nonproprietary Name: Sodium Dicloxacillin Monohydrate

Indications: Infections due to penicillinase-producing staphylococci, streptococci, pneumococci, and also penicillin-sensitive staphylococci.

Contraindications: Hypersensitivity to pencillin.

Dosage: Adults and children over 88 lbs.—125 to 250 mg q6h. Children under 88 lbs.—12.5 to 25 mg/kg/day in divided doses, q6h.

Supplied: Capsules—125 and 250 mg, bottles of 24 and 100. Powder for Oral Suspension—62.5 mg/5 ml. bottles of 80 ml.

MYOCON Granucaps

Vasodilator-Coronary. Rx

Manufacturer: S. J. Tutag Company

Nonproprietary Name: Nitroglycerin

Indications: Management of angina pectoris. Not intended for immediate relief of anginal attacks.

Contraindications: Early myocardial infarction,

severe anemia, glaucoma, increased intracranial pressure.

Dosage: One capsule q12h., may be increased to q8h. For oral use, not sublingual.

Supplied: Capsules, sustained release—2.5 mg.

COMBINATION PRODUCTS

GOURMASE

Enzyme-Digestive. Rx

Manufacturer: Rowell Laboratories

Composition: Alpha-amylase 20 mg.
Pepsin 150 mg.
Pancreatin 525 mg.
Ox bile extract 100 mg.

Indications: Digestive disturbances due to overeating, age, illness, surgery, pregnancy, or nervous indigestion.

Contraindications: Hypersensitivity to any of the ingredients.

Dosage: 1 to 2 capsules tid, with meals. Not for children under 6 yrs.

Supplied: Capsules—bottles of 100, 500, and 1,000.

GOURMASE-PB

Enzyme-Digestive. Rx

Manufacturer: Rowell Laboratories

Composition: Alpha-amylase 20 mg.
Pepsin 150 mg.
Pancreatin 525 mg.
Ox bile extract 100 mg.
Phenobarbital 15 mg.
Belladonna 15 mg.

Indications: Digestive disturbances due to overeating, age, illness, surgery, pregnancy, or nervous indigestion associated with tension and/or pain due to gas formation.

Contraindications: Acute glaucoma, advanced renal or hepatic disease, biliary tract obstruction, or hypersensitivity to any of the ingredients.

Dosage: One capsule with each meal.

Supplied: Capsules—bottles of 100, 500, and 1,000.

NEW DOSAGE FORMS

MACRODANTIN

Antibacterial-Urinary. Rx

Manufacturer: Eaton Laboratories

Nonproprietary Name: Nitrofurantoin macrocrystals

Indications: Infections of the genitourinary tract, i e. pyelonephritis, pyelitis, cystitis, and prostatitis due to susceptible organisms, as shown by culture and sensitivity testing.

Contraindications: Anuria, oliguria, hypersensitivity to the drug, pregnancy at term, infants under one month of age, nursing mothers.

Dosage: 100 mg qid, with meals, for 10-14 days. For individuals of less than average size: 5-7 mg/kg/24 hrs. in 4 divided doses, not to exceed 400 mg/day.

Supplied: Capsules—50 and 100 mg, bottles of 30, 100, and 500.

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Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



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In childhood



Warnings: Lomotil should be used with caution in patients taking barbiturates and with caution, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is a Federally exempt narcotic with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages should not be exceeded, and medication should be kept out of reach of children. Should accidental overdosage occur, signs may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting, pruritus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise. Respiratory depression and coma may occur with overdosage.

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

diarrheas...



- careful supervision
- electrolyte replacement
- specific anti-infective therapy

and...

LOMOTIL®

TABLETS/LIQUID

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride ..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate .....0.025 mg.

LOMOTIL, in conjunction with specifically indicated medical management, may be lifesaving in children with severe diarrhea.

Lomotil lowers the excessive intestinal propulsion characteristic of diarrhea. This reduction of precipitate intestinal flow allows a normal or more nearly normal reabsorption of fluid and electrolytes and counteracts the dehydration so hazardous to children.

Moreover, eight years' experience has demonstrated that Lomotil controls diarrhea with a minimum of unwanted secondary actions.

Senra del Valle and his associates[1] conducted a study of 477 children with diarrhea, most of whom were hospitalized with the disorder. Lomotil, used in 407 of the children, shortened the duration of the diarrhea.

Grinszpan, Goldstein and Divito[2] used Lomotil in 20 children with diarrhea and also reported a prompt disappearance of diarrhea. Harris and Beveridge[3] in a double-blind study of 50 children with diarrhea, however, found no clear pattern to suggest that Lomotil influenced the course of the condition.

Michener, Brown and Turnbull[4] added evidence supporting the beneficial effects of Lomotil in 80 children, concluding that Lomotil was highly useful in controlling abdominal cramping, diarrhea and hypermotility.

ildren: Total Daily Dosage

-6 mo. . . . ½ tsp.* t.i.d. (3 mg.)
-12 mo. . . ½ tsp. q.i.d. (4 mg.)
-2 yr. . . . . ½ tsp. 5 times daily (5 mg.)
-5 yr. . . . . 1 tsp. t.i.d. (6 mg.)
-8 yr. . . . . 1 tsp. q.i.d. (8 mg.)
-12 yr. . . . 1 tsp. 5 times daily (10 mg.)
ults: . . . . 2 tsp. 5 times daily (20 mg.) or 2 tablets q.i.d.

ed on 4 cc. per teaspoonful.

aintenance dosage may be as low one-fourth the initial daily dosage.

References:

1. Senra del Valle, A.; Linfante de Rufinelli, E. B.; Brumetti, E., and Rossi, R. H.: El chlorhidrato de difenoxilato en las diarreas infantiles, Sem. Med. (Buenos Aires) *127*:475-484 (Oct. 4) 1965. 2. Grinszpan, I. L.; Goldstein, A., and Divito, J.: El chlorhidrato de difenoxilato en las diarreas infantiles, Sem. Med. (Buenos Aires) *125*:758-763 (Aug. 27) 1964. 3. Harris, M. J., and Beveridge, J.: Diphenoxylate in the Treatment of Acute Gastro-Enteritis in Children, Med. J. Australia *2*:921-922 (Nov. 27) 1965. 4. Michener, W. M.; Brown, C. H., and Turnbull, R. B., Jr.: Ulcerative Colitis in Children. II. Medical and Surgical Therapy, Amer. J. Dis. Child. *108*:236-242 (Sept.) 1964.

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The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

ar headache, a sovereign remedy was wear a snakeskin round one's head.



A realistic approach to pain relief



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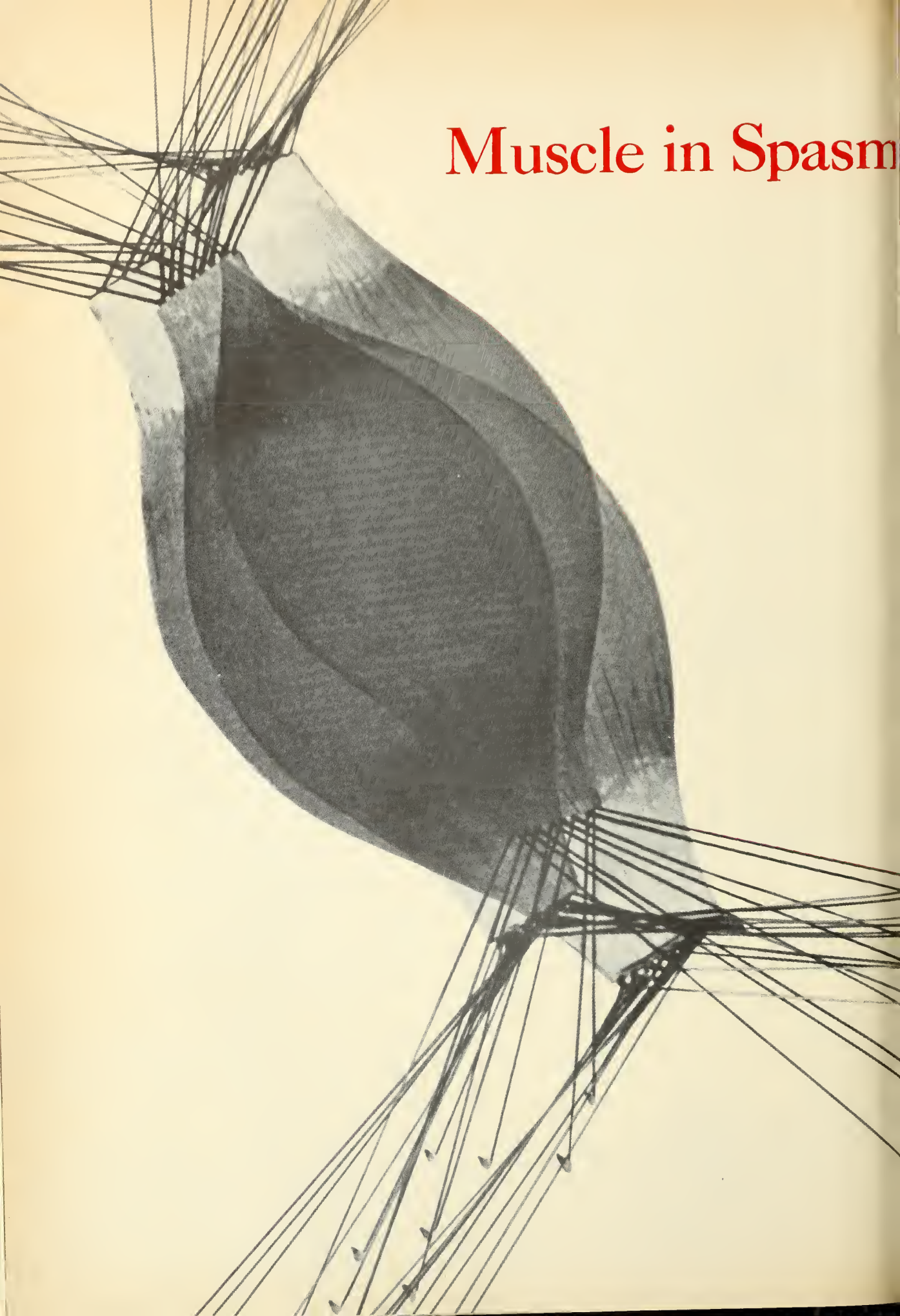
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keeps the promise f pain relief

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The ability of Valium to help relieve skeletal muscle spasm—as well as psychic tension—demonstrates its clinical value and versatility.

The muscle-relaxant effect obtained with Valium, used adjunctively with other drugs or physiotherapy, favorably affects the entire cluster of spasm-related symptoms . . . helps accelerate return to normal activity.

When skeletal muscle spasm and psychic tension coexist, the calming effect of Valium is an added therapeutic benefit that contributes to the total management of the patient.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Valium® (diazepam)
2-mg, 5-mg, 10-mg tablets

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Just one 50 or 100 m
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and hypertension.

HY-6060



Hygroton® can work a long day too

hlorthalidone

hat's because of its prolonged tion, which usually provides mooth diuretic activity roughout the day. And ne-a-day dosage means few blets to take and few tablets pay for in the long run.

Hygroton, brand of chlorthalidone, may mean troublesome side effects for certain patients. And you can't prescribe it in cases of demonstrated hypersensitivity to the drug or in severe renal or hepatic diseases.

Before writing it for your patients, please check the Prescribing Information. It's summarized on the next page.

Hygroton

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Geigy



in edema and hypertension

A little Hygroton® can work a long day

chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic diseases.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant women and nursing mothers since the drug may cross the placental barrier and appear in cord blood and since thiazides may appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000.

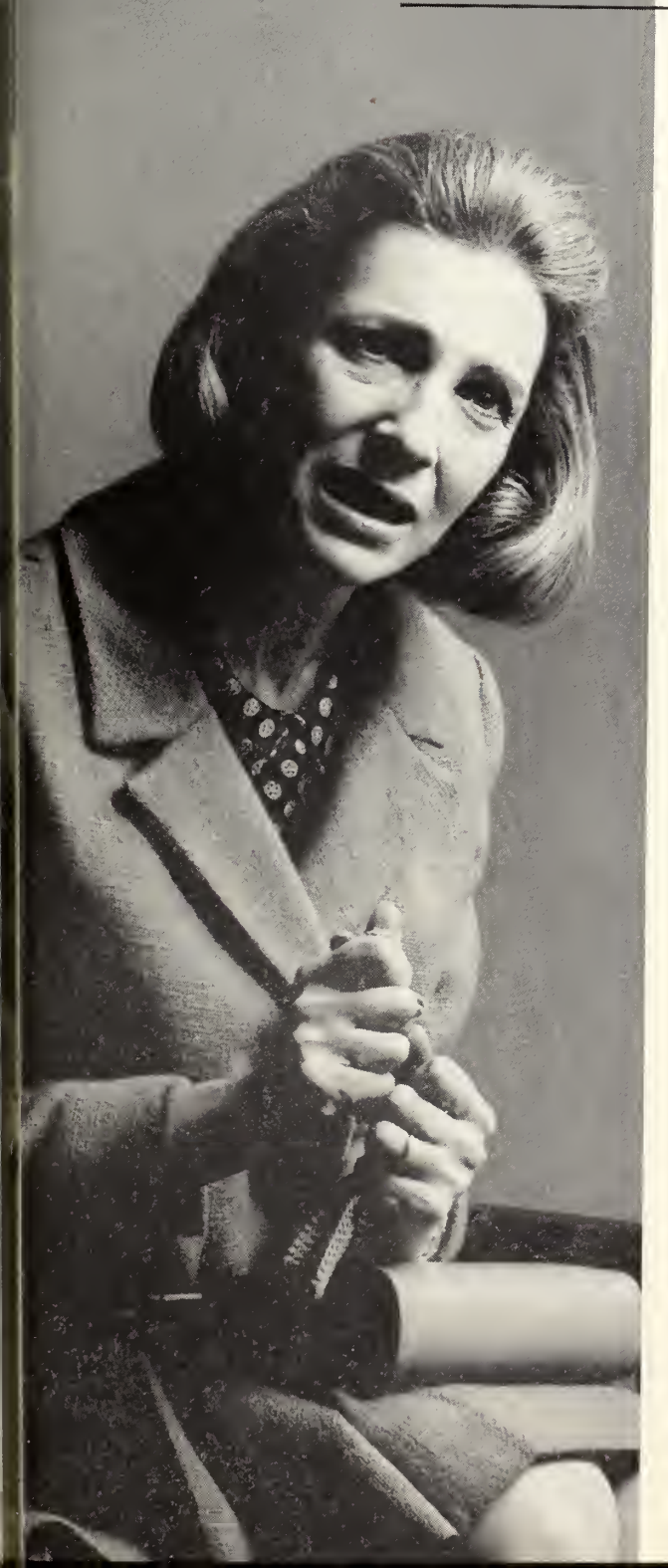
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For full details, please see the complete prescribing information.

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Is it depression?

She says "I'm always on edge..."



...but her other symptoms:

depressed mood, insomnia,
anorexia, feelings of guilt
strongly suggest
an underlying depression.

---

when the diagnosis is depression

ELAVIL® HCl
(AMITRIPTYLINE HCl | MSD)

Indications: Mental depression and mild anxiety accompanying depression.

Contraindications: Glaucoma and predisposition to urinary retention. Not recommended in pregnancy.

Precautions and Side Effects: Drowsiness may occur within the first few days of therapy. Patients should be warned against driving a car or operating machinery or appliances requiring alert attention. When depression is accompanied by anxiety or agitation too severe to be controlled by ELAVIL HCl alone, a phenothiazine tranquilizer may be given concomitantly. Suicide is always a possibility in mental depression and may remain until significant remission occurs. Supervise patients closely in case they may require hospitalization or concomitant electroshock therapy. Untoward reactions have been reported after the combined use of antidepressant agents having varying modes of activity. Accordingly, consider possibility of potentiation in combined use of antidepressants. Monoamine oxidase inhibitor drugs may potentiate other drugs and such potentiation may even cause death; permit at least two weeks to elapse between administration of two agents; in such patients, initiate therapy with ELAVIL HCl cautiously with gradual increase in dosage required to obtain a satisfactory response. Caution patients about errors of judgment due to change in mood, and that the response to alcohol may be potentiated. May provoke mania or hypomania in manic depressive patients.

Side effects include drowsiness; dizziness; nausea; excitement; hypotension; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, including peripheral neuropathy; activation of schizophrenia which may require phenothiazine tranquilizer therapy; epileptiform seizures in chronic schizophrenics; temporary confusion, disturbed concentration or, rarely, transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of the mouth, blurring of vision, urinary retention, constipation; paralytic ileus; jaundice; agranulocytosis.

Careful observation of all patients is recommended. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lower dosage levels.

Supplied: Tablets ELAVIL HCl, containing 10 mg., 25 mg., and 50 mg. amitriptyline HCl, bottles of 100 and 1000; Injection ELAVIL HCl, in 10 cc. vials, containing per cc.: 10 mg. amitriptyline HCl, 44 mg. dextrose, 1.5 mg. methylparaben, and 0.2 mg. propylparaben.

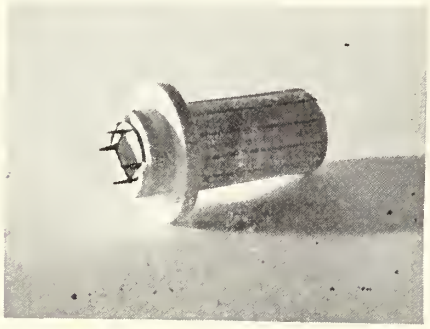
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One by one the family's downed Because the G.I. bug's around

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
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Usual Adult Dose: One or two tablespoonfuls three times daily.
Usual Children's Dose: One or two teaspoonfuls three times daily.

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Any individual may be admitted who, in the opinion of the staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible member of his family.

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* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. Now isn't that a good idea in an iron-containing hematinic?

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If you are a practicing physician who sees patients with cerebrovascular disease, but feel you can't take time off to keep up, the following information is for you!

The Bowman Gray School of Medicine has established a program through which internists and generalists may take two-to-six weeks of intensive training in the prevention and treatment of stroke. The unique program includes re-orientation in basic and clinical neurology as well as cerebrovascular medicine.

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For additional information write to:

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Department of Neurology
Bowman Gray School of Medicine
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- LUTREXIN, the non-steroid "uterine relaxing factor" has been found to be useful by many clinicians in controlling abnormal uterine activity.
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Whenever anxiety induces or intensifies clinical symptoms

Librium®

(chlordiazepoxide HCl)

Quickly relieves anxiety~Helps improve response in psychophysiologic disorders~Seldom impairs mental acuity or physical coordination, on proper dosage~Has wide margin of safety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but a also occasionally observed at the lower dosag ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor mer strual irregularities, nausea and constipation extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes ir EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dy crasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during prc tracted therapy.

Usual Daily Dosage: Individualize for ma mum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 n t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

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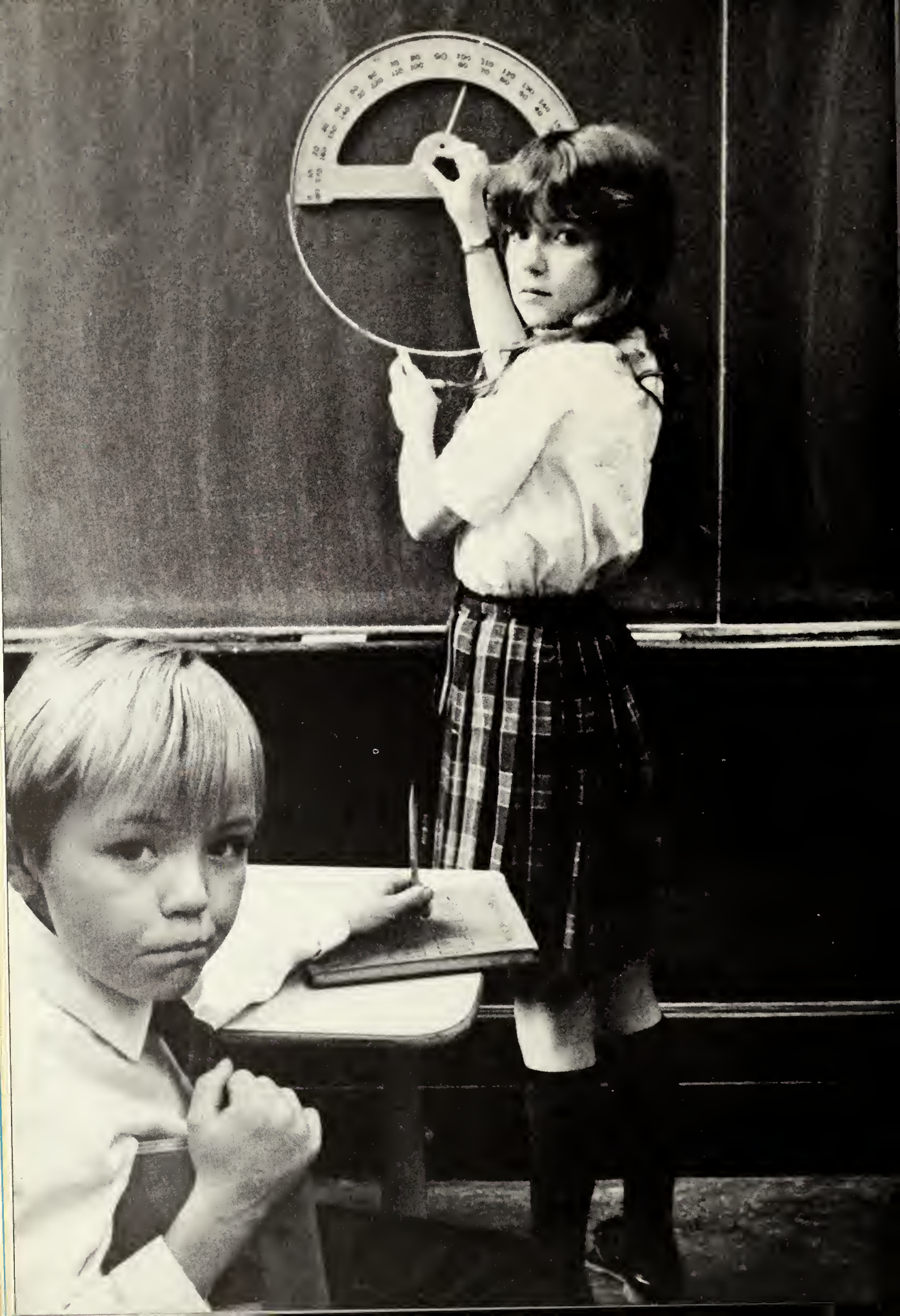
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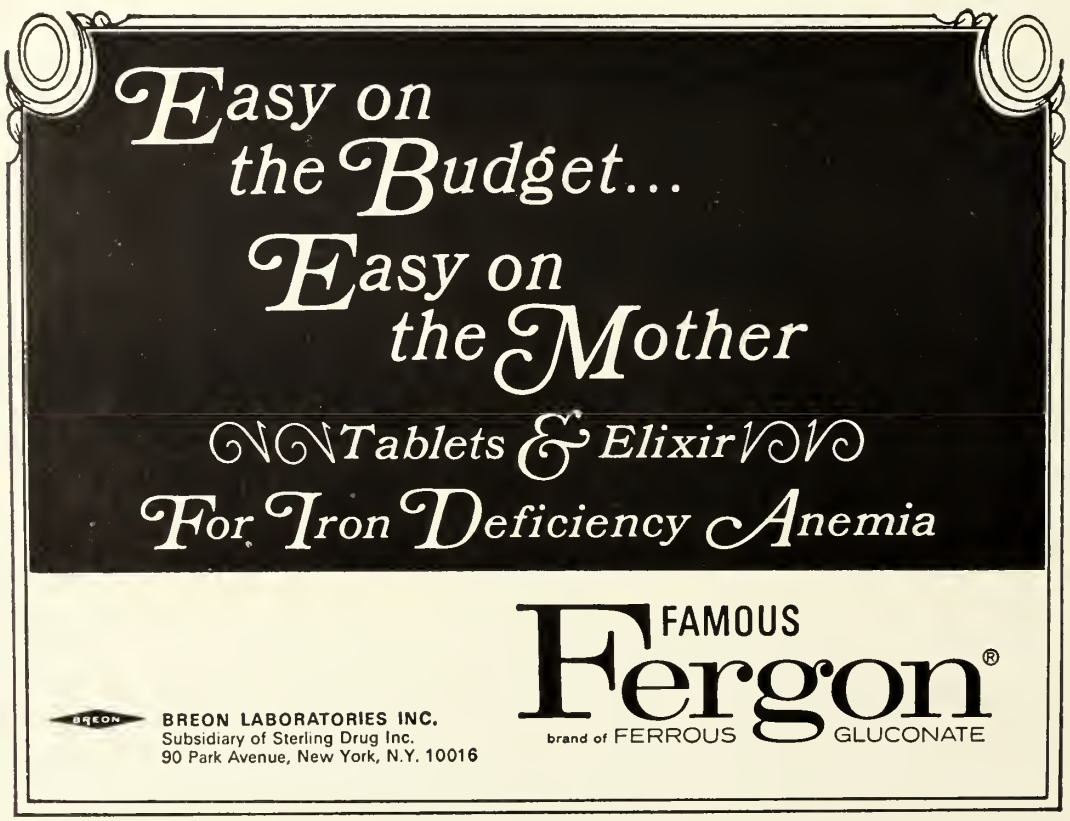
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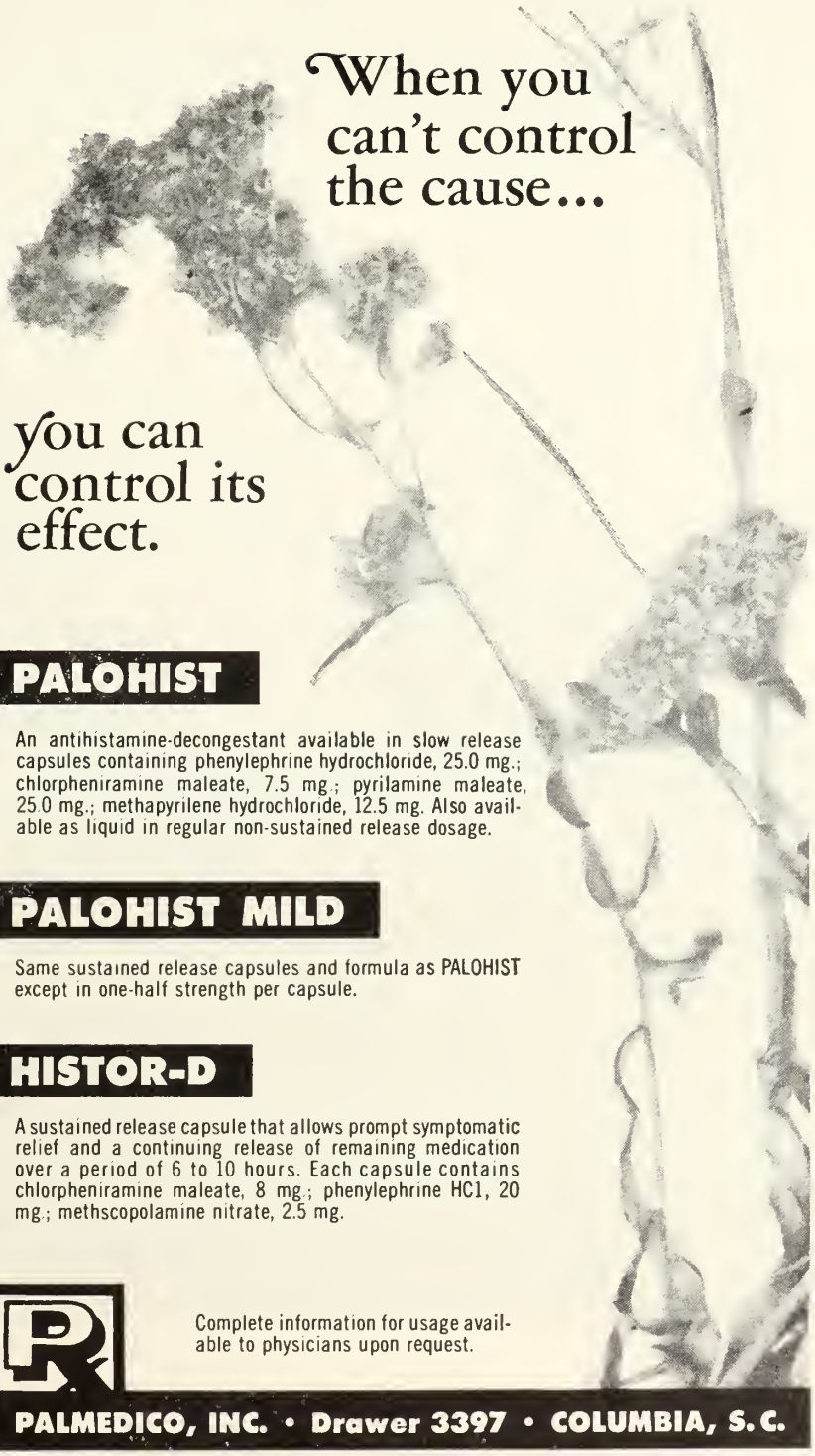
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Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

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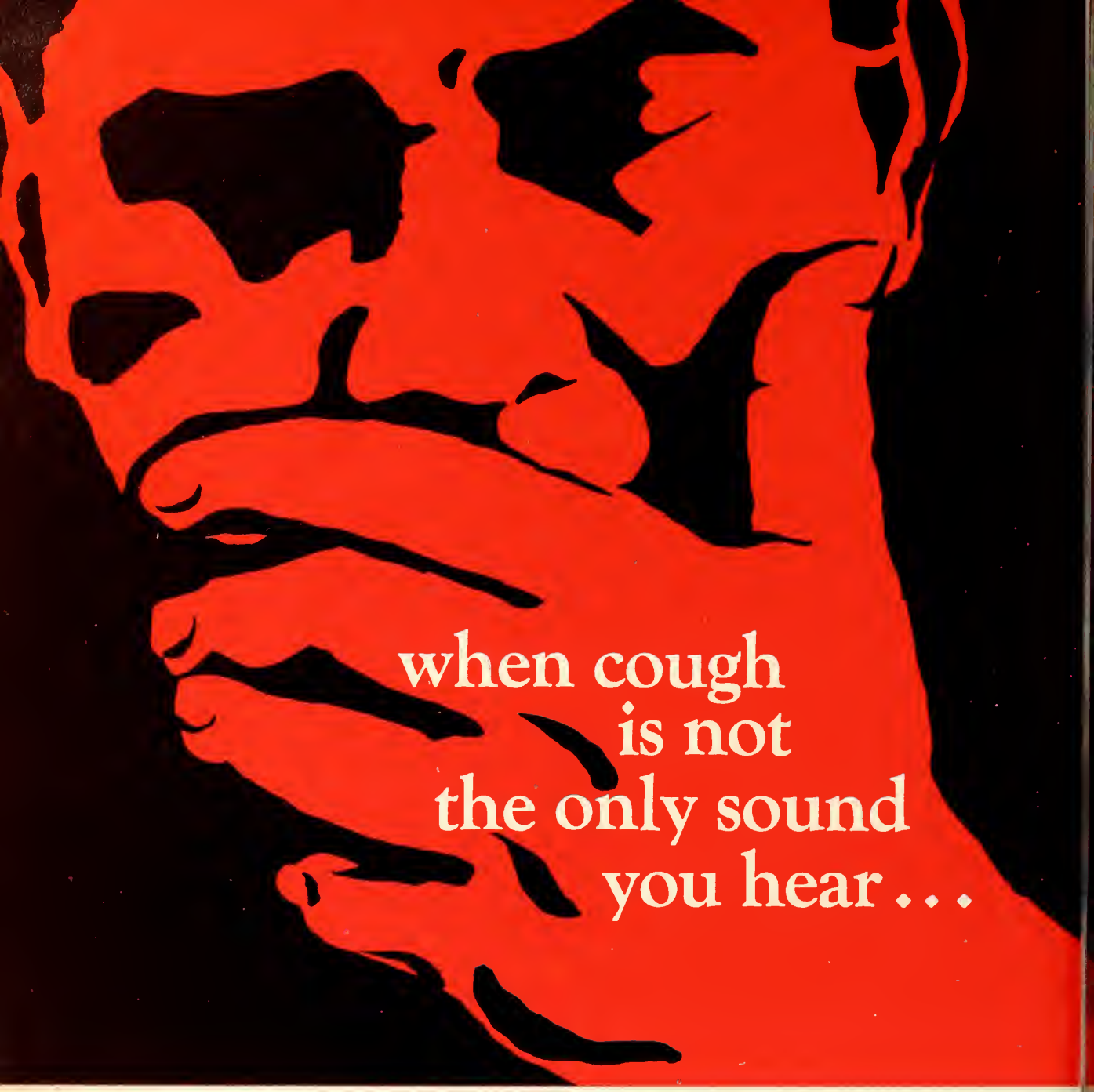
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Staphylococcus aureus

# OF CULTURES	YEAR	% EFFECTIVE
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5,435	1963	88.0%
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References: 1 Fowler, J Ralph et al Clinical Medicine 70 547 (Mar.) 1963 2 Isenberg, Henry D. Health Laboratory Science 1 185-256 (July-Aug.) 1964 3 Isenberg, Henry D Health Laboratory Science 2 163-173 (July) 1965

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Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

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Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



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Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

350-8

Dilantin®
(diphenylhydantoin)

PARKE-DAVIS

In untold thousands of epileptic patients... Dilantin has been, and continues to be, the bedrock of therapy.

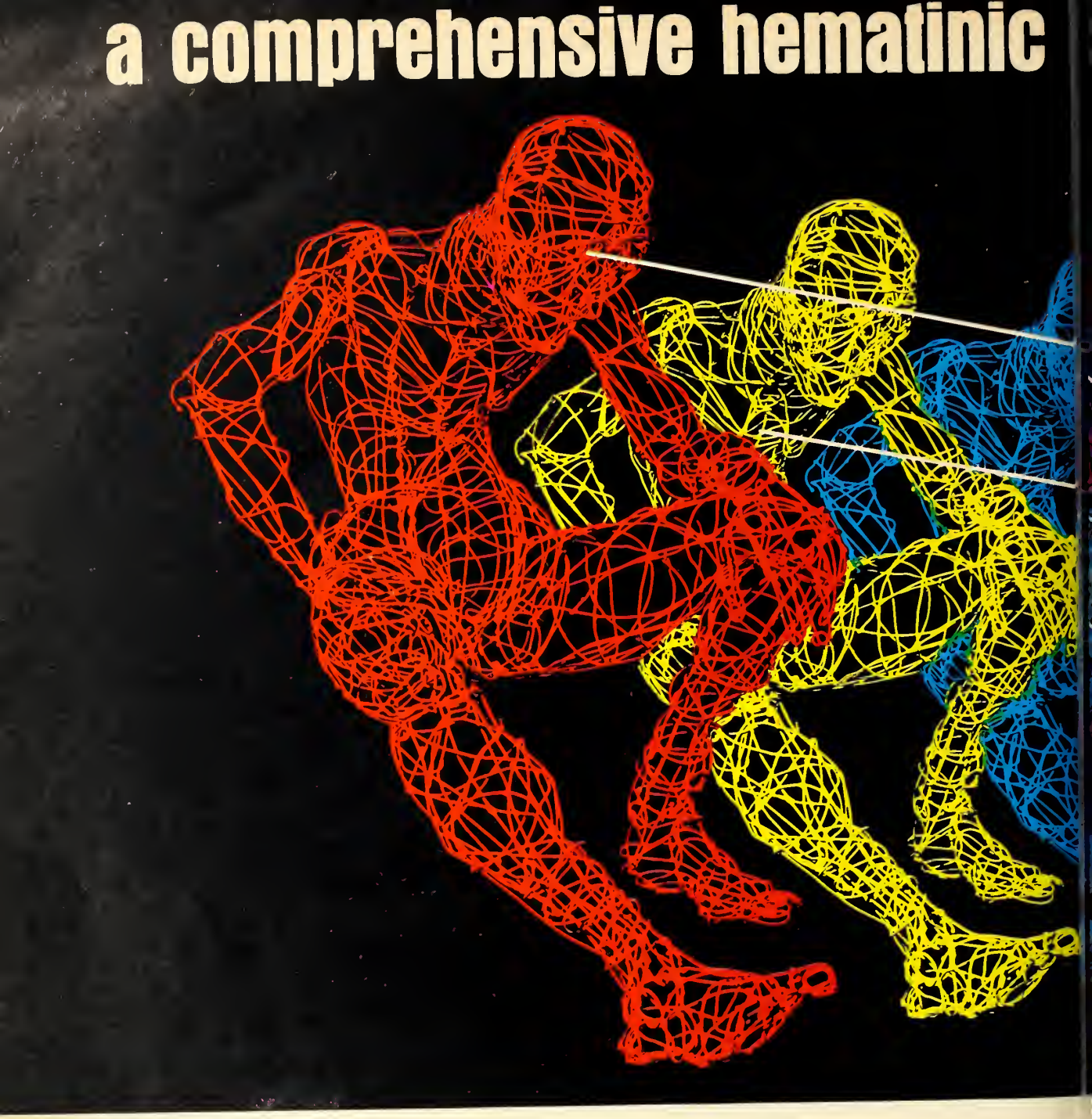
DILANTIN is useful in the treatment of grand mal epilepsy and certain other convulsive states. Its use will prevent or greatly reduce the incidence and severity of convulsive seizures in a substantial percentage of epileptic patients, without the hypnotic and narcotizing effects of many anticonvulsant drugs.
PRECAUTIONS: Periodic examination of the blood is advisable. Nystagmus in combination with diplopia and ataxia indicates dosage should be reduced. The possibility of toxic effects during pregnancy has not been explored. ADVERSE REACTIONS: Allergic phenomena such as polyarthropathy, fever, skin eruptions, and acute generalized morbilliform eruptions with or without fever. Rarely, dermatitis goes on to exfoliation with hepatitis, and further dosage is contraindicated. Gingival hypertrophy, hirsutism, and excessive motor activity are occasionally encountered. During initial treatment, side effects may include gastric distress, nausea, weight loss, nervousness, sleeplessness, feeling of unsteadiness. Macrocytosis, megaloblastic anemia, leukopenia, granulocytopenia, thrombocytopenia, pancytopenia, agranulocytosis, and aplastic anemia have been reported. Nystagmus, lymphadenopathy, lupus erythematosus, erythema multiforme (Stevens-Johnson syndrome), and a syndrome resembling infectious mononucleosis with jaundice have occurred.
DILANTIN is supplied in several forms including Kapseals® containing 0.1 Gm. and 0.03 Gm. diphenylhydantoin sodium.
Parke, Davis & Company, Detroit, Michigan 48232

The color combinations of the banded capsules are Parke-Davis trademarks. The orange-banded white capsule identifies Parke-Davis 0.1 Gm. diphenylhydantoin sodium; the pink-banded white capsule 0.03 Gm. diphenylhydantoin sodium.

PARKE-DAVIS 015R67



a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150	mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5	mcg.
Iron, Elemental (as Ferrous Fumarate)	110	mg.
Ascorbic Acid (Vitamin C)	75	mg.
Folic Acid	1	mg.

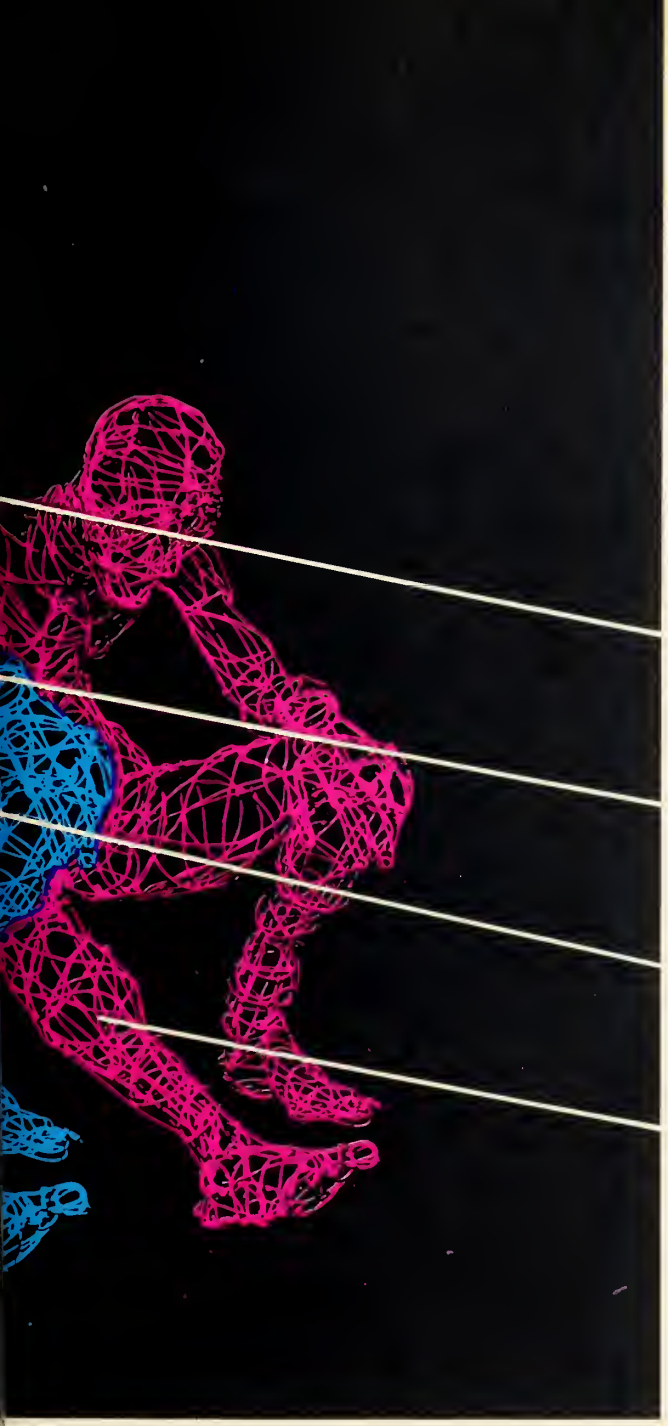
Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appropriat investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without adequa vitamin B_{12} therapy may result in hematologic remission but ne rological progression. Adequate doses of vitamin B_{12} (parenter or oral with potent intrinsic factor as in Trinsicon® [hematin concentrate with intrinsic factor, Lilly]) usually prevent, halt, improve the neurological changes.

As with all preparations containing intrinsic factor, resistanc may develop in some cases of pernicious anemia to the potenti tion of absorption of physiological doses of vitamin B_{12}. If resis ance occurs, parenteral therapy, or oral therapy with so-calle massive doses of vitamin B_{12}, may be necessary. No single reg men fits all cases, and the status of the patient observed follow-up is the final criterion for adequacy of therapy. Period



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

inical and laboratory studies are considered essential and are ecommended.

dverse Reactions: In rare instances, iron in therapeutic doses roduces gastro-intestinal reactions, such as diarrhea or consti- ation. Reducing the dose and administering it with meals will inimize these effects.

In extremely rare instances, skin rash suggesting allergy has llowed oral administration of liver-stomach material. Instances apparent allergic sensitization have also been reported after al administration of folic acid.

osage: One Pulvule twice a day. (Two Pulvules daily produce a andard response in the average uncomplicated case of perni- ous anemia.)

ow Supplied: Pulvules Trinsicon® (hematinic concentrate with trinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

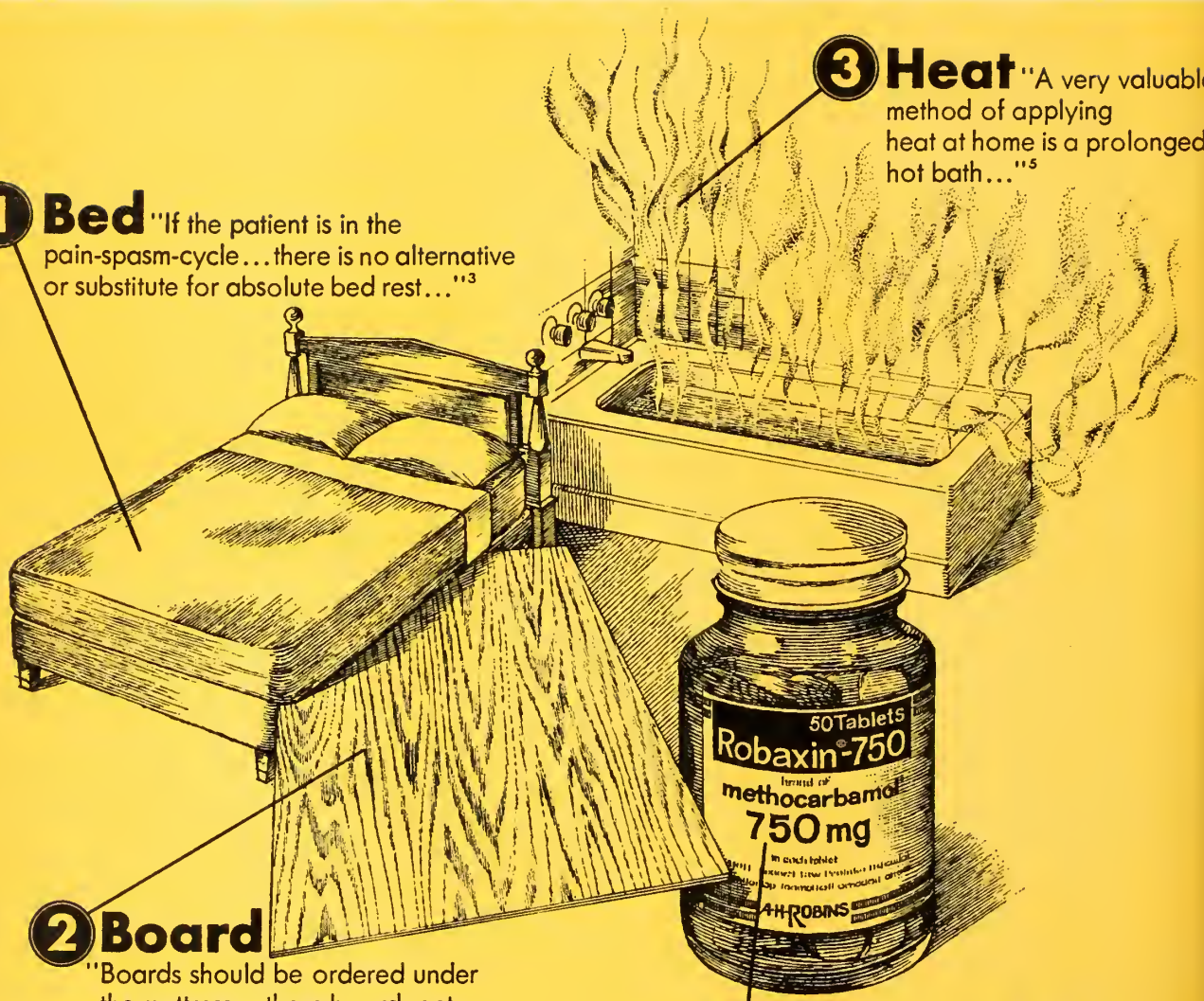
801668

Lilly

LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:



1 Bed "If the patient is in the pain-spasm-cycle...there is no alternative or substitute for absolute bed rest..."[3]

2 Board "Boards should be ordered under the mattress...these boards act by immobilizing the spine..."[4]

3 Heat "A very valuable method of applying heat at home is a prolonged hot bath..."[5]

4 Robaxin®-750 (methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "...without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear an reduced dosage. Hypersensitivity reactians develop infrequently. See product literature for further details. **Also available:** Robaxin® Tablets (methacarbamal, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.)

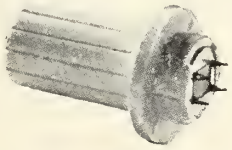
References: (1). Godfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cozen, L.: South Dakata J. Med. 18:26, 1965. (5). Sota-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteopath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New York J. Med. 62:1985, 1962.

A·H·ROBINS A. H. ROBINS COMPANY RICHMOND, VIRGINIA 23220

Tuberculosis? Influenza?
Pneumonia? Leukemia?
Hodgkin's Disease? Syphilis?
Systemic Fungal Diseases?
Chronic Chest Diseases?
or

HISTO?

(Histoplasmosis—"The Masquerader")



A new aid in differential diagnosis

HISTOPLASMIN, TINE TEST
(Rosenthal)

The LEDERTINE™ Applicator with the Blue Handle

Precautions—Nonspecific reactions are rare, but may occur. Vesiculation, ulceration or necrosis may occur at test site in highly sensitive persons. The test should be used with caution in patients known to be allergic to acacia, or to thimerosal (or other mercurial compounds).

Lederle

Ask your representative for details or write Medical Advisory Dept., Lederle Laboratories, Pearl River, New York 10965 406-8



Robitussin-DM Cough Calmers

Each Cough Calmer™ contains the same active ingredients as a half-teaspoonful of Robitussin-DM®. Glyceryl guaiacolate, 50 mg., Dextromethorphan hydrobromide, 7.5 mg. A. H. Robins Company, Richmond, Virginia 23220

A·H·ROBINS

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Diarrhea

TROCINATE® 400 MG.
BRAND THIPHENAMIL HCl.



Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

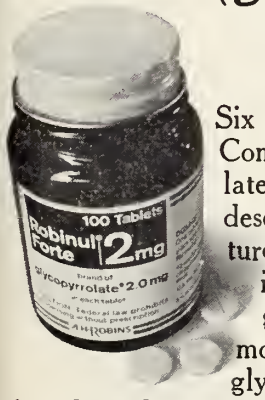
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

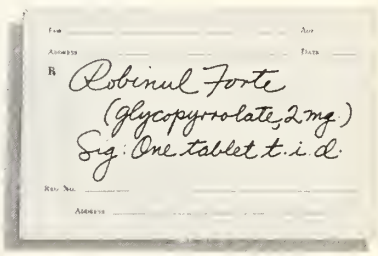
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) found good acceptance among numerous physicians, many others just didn't seem to want to give it a try, probably because the anticholinergic they were already using was giving acceptable results.

However, we believe you'll agree there's always room for a better anticholinergic. This is why we're asking you to give Robinul Forte a fair trial. Robinul Forte exerts a highly specific antisecretory action and marked inhibitory effect on intestinal tone. We're convinced you'll agree that this is indeed an outstanding drug when you observe its outstanding suppression of ulcer symptoms. Furthermore, it is unique in that it reduces intestinal tone, yet has little or no effect on peristalsis. In addition, the incidence of the more bothersome peripheral side effects is low.

No longer does the physician have to look for extreme dry mouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

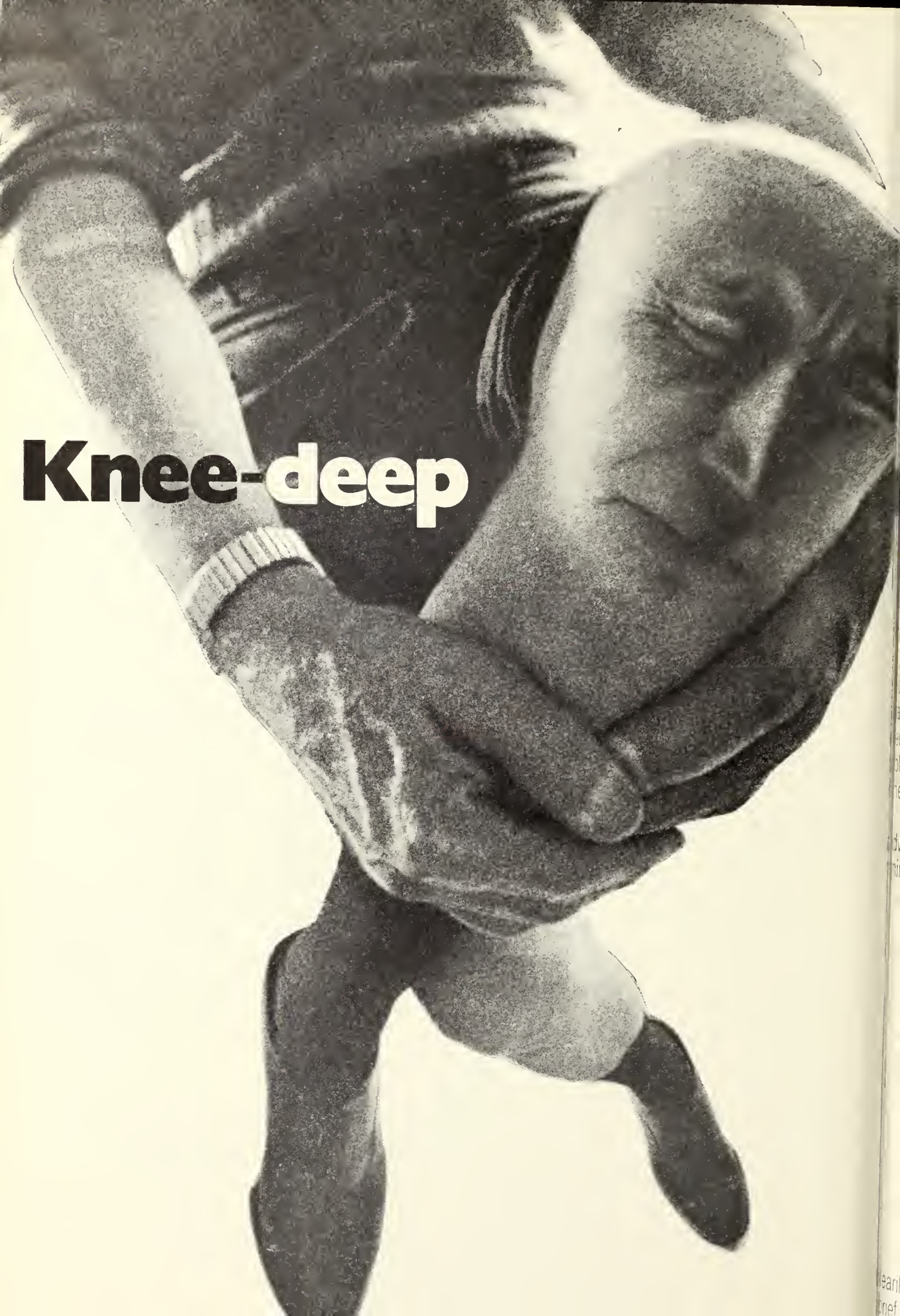
Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.


Knee-deep

n osteoarthritic pain

If aspirin doesn't help, move in
t Tandearil.

The trial period is brief: 1 week.
y one tablet q.i.d. at first. Tandearil
ually starts working within 3 to 4 days.
hen response occurs, as little as 1 or
ablets daily may hold back pain and
fness, and increase joint motion.

On the next page is a summary
dverse reactions, contraindications,
aning and precautions.

Tandearil.
It can help get his mind off his knee.

Please review full Prescribing Information carefully before prescribing.

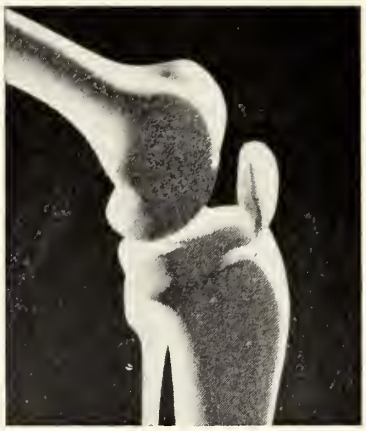
For osteoarthritic knees, spines, shoulders, hips, etc.:

Tandearil®
oxyphenbutazone

n earil, oxyphenbutazone:
or brief summary see next page.

Geigy

TA-6006



Tandearil®
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: This drug is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy, and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell s syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily.

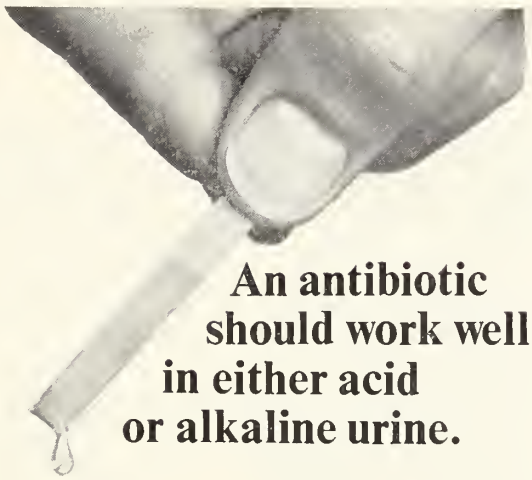
In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

(B)R-46-800-A

For complete details, please see full Prescribing Information.

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502



An antibiotic should work well in either acid or alkaline urine.

It isn't always necessary to adjust urinary pH in treating G.U. infections.

Not when the causative organism is a strain sensitive to DECLOMYCIN® Demethylchlortetracycline, as is often the case.

DECLOMYCIN remains stable and active in either acid or alkaline urine. So there's no need to acidify the urine to keep the antibiotic at work.

Why match the urine to the antibiotic...when you can match the antibiotic to the urine...by prescribing DECLOMYCIN. A b.i.d. dosage makes therapy convenient for your patient.

Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

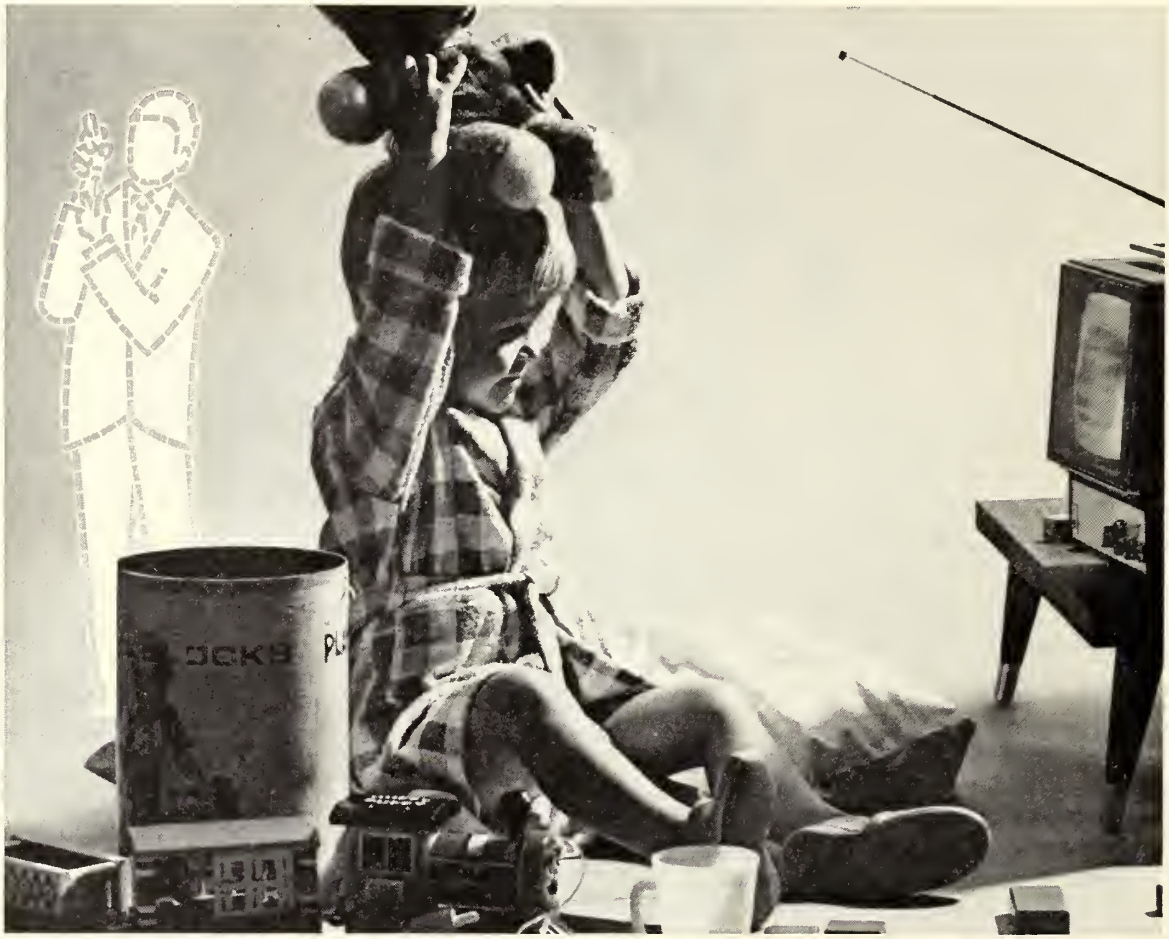
Capsules: 150 mg; Tablets: film coated – 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.

355-B

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

It's almost as if you were there to give an injection of penicillin



V-Cillin K®, Pediatric dependable oral penicillin therapy

Potassium Phenoxymethyl Penicillin

Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K® (Potassium Phenoxymethyl Penicillin Tablets, U.S.P.), 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly), Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567A] 800198

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206

Lilly

The Journal
of the
South Carolina Medical Association

VOLUME 64 DECEMBER, 1968 NUMBER 12

FREQUENCY OF RUBELLA ANTIBODY AMONG FEMALES IN SOUTH CAROLINA

SARAH J. ROBINSON, B.A.*
DIANE D. SMITH, M.T.**
MARY E. BRODIE, B.S., M.A., M.S.P.H.‡

It is well established that prenatal infection with rubella virus causes demonstrable congenital malformations, the most damaging injuries occurring during the first trimester of pregnancy.

At the request of physicians, the Virology Laboratory of the South Carolina State Board of Health routinely determines rubella antibody titers in pregnant women. A summary of six months experience in this laboratory revealed a sufficiently high percentage of susceptibles to emphasize the importance of determining immunity before pregnancy.

Recent reports project a vaccine against rubella infection for general use by 1971 or earlier.[1,2] The South Carolina State Board of Health wished to determine whether a statewide immunization program would be necessary. This required that the status of rubella immunity be determined among females who will be of the child bearing age by 1970.

This report establishes the frequency of antibody to rubella virus among females in South Carolina.

Materials and Methods

Ten high schools in Hampton, Estill, St. George, Irmo, and Chapin, South Carolina were selected for this study. Health educators of the State Board of Health and representatives of the local county health departments met with school officials for the preliminary planning sessions. The study was publicized in local papers and given coverage by local radio stations. Whenever possible, a club within the school was encouraged to take the promotion of this study as a club project. In the several schools where this was done, participation was as high as 90%. Parental permission to participate was required, and a written report of the results was sent to each participant as well as her family physician.

A total of 1194 blood specimens were collected from volunteers ranging from less than 13 years to over 20 years of age. This included both students and teachers.

For comparison, a summary was also made of the specimens submitted to this laboratory by physicians during the same nine months period. A total of 152 pregnant females, all over the age of 20, were tested for rubella antibody.

The rubella virus hemagglutination-inhibition test described by Stewart, et al[3]

*Chief, Virology Section, Laboratory Division, South Carolina State Board of Health, Columbia, South Carolina.
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Table 1.

Frequency of Rubella Antibody by Race and Age in Special Study Population

	White Females			Negro Females			Total	Total	Total
Age	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	Positive %
*LT 13				17	10	58.8%	17	10	58.8%
13	52	39	75.2%	17	13	76.9%	69	52	75.4%
14	164	138	84.3%	88	67	75.7%	252	205	81.3%
15	149	135	90.8%	114	78	68.5%	263	213	80.9%
16	135	121	89.4%	112	96	84.4%	247	217	87.9%
17	101	93	92.8%	90	81	90.0%	191	174	91.9%
18	33	28	84.5%	36	31	86.2%	69	59	85.5%
19	4	4	100 %	12	12	100 %	16	16	100 %
20	55	52	94.5%	15	13	86.6%	70	65	92.9%
GRAND TOTAL	693	610	88.0%	501	401	80.0%	1,194	1,011	84.7%

*LT—Less Than

with modifications recommended by the National Communicable Disease Center[4] was used throughout. Tests were performed using microtiter equipment.*

Rubella antigen was obtained commercially† as were the red blood cells.‡ Other reagents were available from our local laboratory sources.

Sera to be tested were first absorbed with kaolin and adult chick red blood cells to remove non-specific inhibitors. Antibody titer was reported as the highest dilution of serum causing inhibition of agglutination.

Results

It will be seen in Table 1 that of the study group tested, a total of 1011 showed a positive titer for rubella. This represented 84.7% of those tested. Of those tested, 610 white females, or 88% and 401 Negro or 80% showed positive titers.

These figures correlate well with similar studies by other investigators.[5-7] Sever found 17.5% susceptibility rate in his study of 600 pregnant women while Rawls and Melnick, et al, found 13-20% of their study group susceptible. In most studies, it has been found that the susceptibility rate is significantly greater among Negroes than whites. In the current study white females showed a 12% susceptibility rate as compared to a 20% rate for the Negroes tested. The reason for this difference is not definite, although it follows the same immunological pattern found in other viral diseases.

As would be expected, susceptibility decreased with increase in age. That age 19 showed 100% with antibody is not considered significant and may be related to the fact that this age group represents the smallest sampling. The under-thirteen grouping is also a very small sample and represents students from only two schools.

Paired specimens were available for most of the 152 pregnant women in the concomitant study. Of this number, 11 showed a four-fold difference in the specimens taken in the acute and convalescent stages. Three showed titers of 320 or greater in both speciments and recent infection could be postulated on the basis of the time interval between exposure and collection of the first specimen.

That 21% of the pregnant women tested had either a negative titer or a seroconversion indicating a previously negative titer may be due to several variables. The race of these patients was not re-

*Available from Cooke Engineering Company, Alexandria, Virginia.

†Flow Laboratories, Rockville, Maryland.

‡Microbiological Associates, Inc., Bethesda, Maryland.

corded, and physicians are more apt to send sera to the laboratory for testing when they elicit a history of exposure during early pregnancy from the patient.

Table 2.

Results of Paired Sera in Adult Pregnant Females in South Carolina

	No.	%
Previous Infection	120	79.0%
Current Infection	14	9.2%
Negatives	18	11.8%
Total Tested	152	100 %

Figure 1 compares graphically the percentage of positives represented in each titer grouping, by race and study groups.

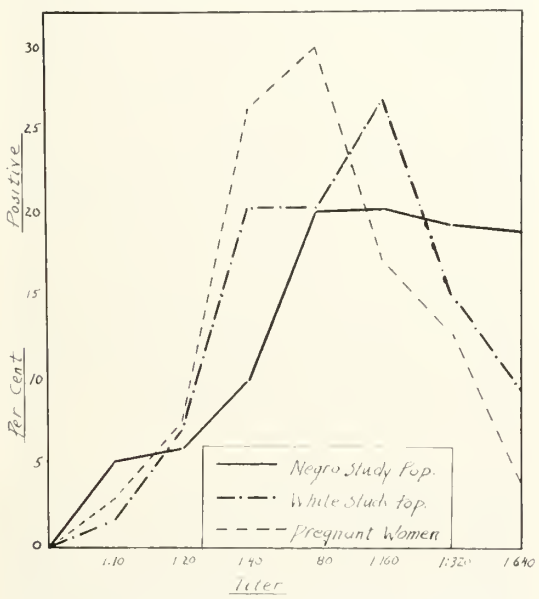


Fig. 1. Distribution of Antibody Responses to Rubella in Special Study Population and Adult Pregnant Women.

The titers of the white populations, both student and adult, peaked very sharply, then dropped significantly to much lower percentages in the higher titers. This could represent infection in epidemic years, since rubella follows a seven year cycle. It would also account for the lower peak in the group of pregnant women, all over the age of 20. Their infection probably occurred in an earlier epidemic than the one affecting the study population.

It appears that the Negro population was not affected by epidemics, but that infection occurred at an even rate. The plateau, which begins at the 1:40 level and remains constant, shows each increasing dilution represented by 20% of the positive population. It is also noteworthy that 20% of the total Negro population remained negative for rubella antibody.

The mean titer for each group can also be determined from Figure 1. The white females of the study group showed a 1:80 mean titer, the Negro females 1:120, and the pregnant women a 1:60 mean titer.

Another interesting observation concerned the participant's statement of whether or not she had suffered from german measles. Table 3 shows that over 80% of the girls and women who stated they had not had german measles proved to have a positive titer, conversely, 8.6% of the white and 21.5% of the Negro females who believed they had suffered from the disease proved to have negative titers.

Conclusion

Females in South Carolina show a susceptibility rate to rubella in accordance with that found by other investigators in similar populations.

While a greater number of Negro females in the study population were without antibody to rubella than were white females, more than 80% of the total number tested had immunity to rubella. Whether the Negro race has some nonspecific immunity factor is not known.

It has been proven that the HI test is a reliable means of determining rubella immunity and that the presence of this antibody offers life-long protection to the individual. Since sub-clinical infections account for a great portion of the total rubella infection, history given by the patient concerning rubella is not reliable. Furthermore, the clinical picture is not always clear-cut in those cases showing overt signs of illness. Much concern to both patient and physician could be elimi-

Table 3.

Association of Rubella Antibody and History of Infection

History of Rubella	Antibody No.	Antibody %	No Antibody No.	No Antibody %	Total No.
		White Females			
Yes	160	91.4%	15	8.6%	175
No	100	82.7%	21	17.3%	121
Not sure	350	88.1%	47	11.9%	397
		Negro Females			
Yes	11	78.5%	3	21.5%	14
No	194	81.8%	43	18.2%	237
Not sure	196	78.4%	54	21.6%	250

nated if the immune status of the patient were known.

The authors conclude that the immune status of all females of the child-bearing age should be determined before their first pregnancy. They suggest that this test be made part of a required pre-marital examination.

Whether a statewide immunization program will be necessary when a vaccine becomes available for general use, is open to question. Certainly, it would be recommended for all females in the child-bearing age with a negative titer.

Summary

A study of the frequency of rubella antibody in 1194 females from ten high schools in South Carolina was made. The presence of antibody to rubella was found in 84.7% of the sera tested. The average susceptibility rate was 15.3%. A greater percentage of the Negroes tested were found to be susceptible (20%) than the white females tested (12%).

There was no correlation between the presence of rubella antibody and the history of past exposure given by the participants.

A concomitant group of 152 pregnant women were tested. They were found to have a susceptibility rate of 21% and a current infection rate of 9.2%.

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TREATMENT OF BACTERIAL UPPER RESPIRATORY INFECTIONS:

SULFONAMIDE OR ANTIBOTIC?

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In instituting treatment of any bacterial upper respiratory infection it is imperative to determine whether or not Group A beta-hemolytic streptococci are present, and, if so, to treat the patient harboring these pathogens for at least 10 days with adequate dosages of penicillin or erythromycin.[1] Once this basic practice is universally adopted, particularly in children and adolescents, the sequelae of rheumatic fever and glomerulonephritis[1-3] could become virtually extinct.

In acute secondary bacterial infections, which form the bulk of everyday URI's seen in office practice and outpatient clinics, the choice of the appropriate drug depends upon a number of factors, varying with the individual patient: the severity of the infection; its duration; the known sensitivity of the patient to a sulfonamide or an antibiotic; and, usually, the determined susceptibility of the implicated pathogen to the antibacterial drug selected.

However, two factors are of overriding importance: 1) the relative and comparative safety of the drug with regard to the side effects, toxic propensities, and the tendency to produce radical changes in the floral ecology which may lead to the emergence of resistant bacterial strains and fungal overgrowth; and 2) the inadvisability of using an antibiotic in treating the common and recurrent URI, thus blunting its future effectiveness against serious or fulminating bacterial illnesses.

In general, the foregoing considerations have determined the use of a sulfonamide in the ENT Clinic of the Medical College of South Carolina Hospital. A comparative study was conducted to evaluate the clinical efficacy of sulfadimethoxine (Madribon) and oxytetracycline HCl. (Terramycin) Both drugs are so widely employed in bacterial infections, that their pharmacologic action and antimocrobial activity need but brief review.

Sulfadimethoxine is a potent antibacterial[4] of low toxicity and sustained chemotherapeutic action;[5] a single 1-gram oral dose produces peak plasma concentration within 4 to 6 hours with therapeutic blood levels maintained for 24 hours. The drug is slowly excreted as a highly soluble glucuronide.

Oxytetracycline HCl, a broad spectrum antibiotic is effective against numerous susceptible strains of gram-positive and gram-negative microorganisms[7] at 1 gram daily (250 mg, q.i.d.). Current research indicates that the mechanism of its bacteriostatic action is through interference with microbial protein synthesis, involving specifically the transfer of amino acids from soluble RNA to the polypeptide on the organism's ribosome.[8]

Materials and Methods

A total of 96 outpatients made up the study-group. The ages of the subjects (68 female, 28 male) ranged from 3 to 57 years; over 55 per cent were children or adolescents under age 19.

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Table 1

Clinical Response To Sulfadimethoxine vs Oxytetracycline

	Sulfadimethoxine						Oxytetracycline					
Diagnoses	No. of Pts.	Exc.	Good	Fair	Poor	No Eval.	No. of Pts.	Exc.	Good	Fair	Poor	Totals
Tonsillitis, acute	40	13	16	7	4	—	24	10	10	3	1	64
Pharyngitis, acute	9	3	0	0	0	1	2	0	1	0	1	11
Otitis media, acute	5	1	3	1	0	—	3	1	0	2	0	8
Streptococcic sore throat	2	0	0	1	1	—	2	2	0	0	0	4
Abscesses (peritonsillar)	2	2	0	0	0	—	2	1	0	1	0	4
Other (otitis externa; sinusitis; cerv. lymphadenopathy)	2	0	1	0	0	1	3	2	0	1	0	5
TOTALS:	60*	21	23	9	5	2*	36	16	11	7	2	96
		75%						75%				

*Since 2 patients on sulfadimethoxine were not evaluated, the percentage shown was based upon a total of 58 patients.

Prior to their seeking medical attention, the patients had symptoms of respiratory infection for an average of 4 days. Diagnoses confirmed were: acute tonsillitis in 64 patients, acute pharyngitis in 11, otitis media (acute and chronic) in 8, peritonsillar abscess in 4, streptococcic sore throat in 4, and miscellaneous infections in 5 others (Table I).

At the first clinic visit, after examination and diagnosis, each patient received either sulfadimethoxine or oxytetracycline. Bacteriologic cultures were made of exudates (from nares, nasopharynges, or tonsils and tonsillar fauces, or from aural canals) taken from all 96 patients prior to therapy. Inocula were plated on blood-agar media with occasional additions of broth. The decision as to which drug to administer was left to each of the 8 physicians rotated on the ENT Clinic Service. Each patient was questioned as to prior treatment with, or sensitivity to either drug. The second weekly clinic visits were so scheduled that each patient was evaluated by the same clinician who examined, diagnosed and initiated treatment. On the seventh treatment day, second cultures were done for all but 2 patients, the results of which—together with clinical assessments—dictated whether or not the assigned antibacterial drug should be continued for a second week.

Drug Regimens and Dosages. A 1-week supply of oral sulfadimethoxine tablets was dispensed to 60 patients; the average starting dose was 4 tablets (2 gm) followed by 1 tablet (0.5 gm), twice daily. Similarly, oxytetracycline was distributed to 36 patients, given at an average initial dose of 250 mg, with the same dosage q.i.d. as maintenance. In addition to the 2 test-drugs, saline gargles, aspirin, mild antiseptic mouth washes, antitussives, and expectorants were prescribed as adjunctive therapy for 40 patients.

Criteria for evaluating the clinical responses to each drug were as follows: "Excellent," if the patient became asymptomatic within 2 or 3 days and showed a bacteriologically negative culture 1 week post-therapy; "Good," if clinically asymptomatic within 3 to 4 days with a pathogen-free culture 1 week post-therapy; "Fair," if symptom free within a week, but with a second culture positive for the known pathogen or for newly emergent organisms; a rating of "Poor" might indicate minimal or no clinical improvement with bacteriologic cultures persistently positive after 2 weeks of treatment.

Comparative Results

Clinical Responses. Judged by the 75 per cent of patients who had obviously good-to-excellent responses to each drug, sulfadimethoxine and oxytetracycline were equally effective (Table I).

Of the 60 sulfadimethoxine-treated patients, the 9 showing "Fair" responses were clinically asymptomatic within a week or less, despite bacteriologically positive cultures on the seventh treatment day. Of these, 7 had acute tonsillitis (4 cases due to beta-hemolytic streptococci and 3 attributable to virulent staphylococci, coagulase-positive); 1 had recurrence of the acute otitis media, also due to *Staphylococcus aureus*, while the ninth had a streptococcal sore throat from which both alpha-hemolytic streptococci and virulent staphylococci were isolated, with the latter persistent on repeated culture.

Of the 5 patients with "Poor" results, 3 showed marked clinical improvement within 7 days, although resistant strains of beta-hemolytic streptococci and/or coagulase-positive staphylococci were still

Table 2

Bacteriologic Response To Sulfadimethoxine vs Oxytetracycline
No. of Cultures in Which Organisms were Isolated, Eradicated, Persistent, or in which New Strains Emerged

	Sulfadimethoxine				Oxytetracycline			
	Pre-therapy	Post-therapy			Pre-therapy	Post-therapy		
	Isolated	Eradicated	Persistent	Emerged Strains	Isolated	Eradicated	Persistent	Emerged Strains
Streptococcus (Beta-hemolyticus) (non-group A)	31	24	7	3* 2**	22	21	1	2* 1** 2† 1‡
Streptococcus viridans (Alpha-hemolyticus)	12	7	5	0	6	4	2	2†
Staphylococcus aureus (coag. +)	17	10	7	0	5	4	1	1**
Staphylococcus albus	2	—	2	0	1	1	—	0
Neisseria species	3	3	—	0	4	4	—	0
Gram-negative bacilli (not otherwise identifiable)	2	2	—	0	1	1	—	0
Diplococcus pneumoniae	1	1	—	0	2	2	—	0
Hemophilus influenzae	0	—	—	0	1	1	—	0
Psuedomonas species	0	—	—	0	1	1	—	0
Clostridium species	0	—	—	0	1	1	—	0
Paracolon bacilli (possible contaminants)	1	1	—	0	1	1	—	0
Cultures negative (not added)	(2)	negative	—	0	0	—	—	0
TOTALS:	69	48(70%)	21	5(7%)	45	41(91%)	4	10(22%)

*Streptococcus viridans (alpha-hemolyticus) †Staphylococcus aureus
**Pneumococcus species ‡Neisseria species

present on culture after 2 weeks of therapy. All 5 cases were considered to represent chemotherapeutic failures. Following disc-sensitivity tests, the 5 patients were treated with an appropriate antibiotic. Two patients were not evaluated due to inadequate sulfadimethoxine treatment through failure of the patient to adhere to assigned dosage schedules.

Of the 36 oxytetracycline-treated patients, 7 showed only "Fair" results. Included were 3 cases of acute tonsillitis (one due to alpha-hemolytic streptococci and two due to beta-hemolytic streptococci). These three patients had positive cultures after two weeks. Two patients with acute otitis media (one due to alpha-hemolytic streptococci, and one due to staphylococci) had positive cultures with emergent strains of pneumococcus and alpha-hemolytic streptococcus, respectively, after 7 days on the antibiotic. Another patient with otitis media had a poor clinical outcome, even though the pathogen, beta-hemolytic streptococcus, was eradicated. A seventh, with acute frontal sinusitis, had cultures positive for virulent staphylococcus for 2 weeks, post-therapy "Poor" ratings were accorded 2 patients with acute tonsillitis and pharyngitis: 1 with beta-hemolytic streptococcus; the other with emergent staphylococcus colonies found on repeated cultures, 2 weeks post-treatment.

Bacteriologic Results. The bacteriologic findings are summarized in Table II. From 96 pre-therapy cultures, 114 organisms were isolated. In order of frequency of isolation, the pathogens were *Streptococcus pyogenes* (beta-hemolyticus); *Staphylococcus aureus* (coagulase-positive); *Streptococcus albus;* a Pseudomonas species; *Streptococcus viridans* (alpha-hemolyticus); and *Diplococcus pneumoniae.* Other organisms isolated, but rarely implicated as pathogens in secondary upper respiratory infections, were *Hemophilus influenzae,* Neisseria and Clostri-

dium species, and gram-negative bacilli (not otherwise identified).

As will be noted in Table II, the total percentage of bacteriologic conversions was higher for the oxytetracycline-treated group (91%) than for those on sulfadimethoxine therapy (70%). Detracting from the antibiotic's efficacy, however, was the 22 per cent of newly emergent organisms following one week's therapy. In four repeated cultures, following eradications of alpha- or beta-streptococci, dominant colonies of coagulase-positive *Staphylococcus aureus* emerged. Superinfection by oxytetracycline-resistant staphylococci has long been recognized as a problem with its use in the other bacterial infections.[9-12]

Side Effects. Aside from 3 instances of skin rash—2 occurring in two patients taking sulfadimethoxine and one in a patient on oxytetraycline, no other side effects were reported. One of these patients had a maculopapular rash which disappeared spontaneously; in the other 2 patients, fine pruritic rashes appeared on the extremities, subsiding upon discontinuance of each drug.

Discussion

The equivalent effectiveness of the compared drugs is apparent from the above results. Similar results are also reported in 2 comparative double-blind studies[13-14] —one in 118 pediatric patients; the other in 96 children and adults treated for URIs with sulfadimethoxine or oxytetracycline and both studies demonstrated parallel safety and efficacy.

What, then, are the advantages of a sulfonamide over an antibiotic, or vice versa? The factors determining one's choice warrant the following qualifing restatement:

Minor Side Effects. Reactions, such as allergenic skin rash, transient nausea, diarrhea, metallic taste and the like, have presented no serious problems with the use of either drug. Considering their wide usage, the incidence of minor side effects has been negligible.[10]

Toxicity and Metabolic Derangements. Hepatotoxicity or renal complications are rare during sulfadimethoxine therapy, but are not infrequent with the extended use of oxytetracycline;[15] additionally, the latter produces antianabolic effects that can be detrimental in patients with reduced renal function.[11] The brown discoloration and faulty enamel formation of children's teeth which may follow the use of oxytetracycline either in mothers during late pregnancy, or in children under the age of 6 is well documented.[10-11,16] These complications have never been associated with any of the sulfonamides.

Recent cautions issued[17] relative to an association of the long-acting sulfonamides with the Stevens-Johnson syndrome merit comment. The fact remains that this syndrome—described by Hebra over 100 years ago and appearing sporadically[18] (sometimes in epidemics) worldwide since then—has no known cause.[19] A review of the world literature would suggest that this syndrome, briefly defined as "acute inflammatory systemic disease producing a spectrum of clinical patterns"[20] must have a multiple etiology. It has been associated with a vast array of drugs, with viral and bacterial infections, vaccinations, pregnancy, deep x-ray therapy and even various foods.[18-19] While its association with long-acting sulfonamide therapy is the most recent of numerous hypotheses,[19] before credulous acceptance of this, the clinician is referred to a recent informative article[19] on the syndrome.

Superinfections. An important reason for selecting a sulfonamide over an antibiotic is the documented propensity of the latter (the tetracyclines, in particular) to 1) promote superinfections by staphylococci,[11,12] *B. proteus* and *Pseudomonas aeruginosa;*[11] and 2) encourage monilial overgrowth. Bacterial resistance (rare,

and slow to develop during sulfonamide use)[21] is a requisite in the genesis of superinfection. Additionally, such resistance may not only reflect therapy with a specific antibiotic, such as tetracycline, but of kindred drugs, due to bacterial cross-resistance.[11,12]

The Long Range Effect. The long-range consideration of possible bacterial resistance to antibiotics represents the ultimate determinant for the choice of a sulfonamide. To use antibiotics in acute and recurrent upper respiratory infections may well nullify their efficacy against future life-threatening infections.

Summary and Conclusions

1. An evaluation of the comparative efficacy of sulfadimethoxine (Madribon) and oxytetracycline (Terramycin) was conducted in 96 ENT Clinic outpatients with acute bacterial upper respiratory infections, primarily tonsillitis and pharyngitis. Also treated were 8 patients with acute otitis media.

2. Dosages of the sulfonamide in 60 patients averaged 2 Gm, stat, and 0.5 Gm twice daily. The antibiotic dosage in 36 patients averaged 250 mg, q.i.d. (1 Gm day). Drug treatments averaged 1 week.

3. Pre-therapy bacteriologic cultures repeated on the seventh day of medication, together with assessment of clinical improvement, were the criteria for comparative evaluations.

4. Clinical responses to the 2 drugs demonstrated equal efficacy, with 75% of patients on each antibacterial becoming asymptomatic within 3 to 7 days. Similarly, fair and poor results (the latter representing therapeutic failures) were found in equivalent numbers.

5. The total percentage of bacteriologic conversions was higher in patients on oxytetracycline therapy than in those on sulfadimethoxine (91% vs 70%). However, repeat cultures after oxytetracycline revealed a 22% rate of newly emergent organisms; in particular, pathogenic *Staphylococcus aureus*, coagulase-positive, which followed the eradication of alpha- or beta-hemolytic streptococci.

6. Side effects were minimal; 3 instances of skin rash occurred—2 associated with sulfadimethoxine; 1 with oxytetracycline.

7. Primary considerations favoring the use of a sulfonamide rather than an antibiotic in the treatment of URI are: 2) with antibiotic use, the possibility of development of bacterial resistance, superinfections and monilial overgrowth; and b) the inadvisability of using an antibiotic in common, recurrent bacterial URI, thereby nullifying its efficacy against future life-threatening infections.

8. In the treatment of secondary bacterial upper respiratory infections, the advantages of this long-acting sulfonamide, sulfadimethoxine, are its rapid absorption and chemotherapeutic action, low toxicity index, ease of 1 or 2-a-day administration, low cost, and its ability to maintain adequate protective blood levels (despite "missed doses"). These assets are of a signal value in ENT clinic outpatients.

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"Death" From Lightning and the Possibility of Living Again—H. B. Taussig Ann Intern Med 68:1345-1353 (June) 1968

A review of a number of persons who were struck by lightning and recovered is presented. Statistics indicated more persons recover after being struck than are killed. A person struck by lightning is instantaneously rendered unconscious. Heart action and respiration cease. Spontaneous recovery may occur if respiratory narcosis is not too long. The heart usually starts in sinus rhythm with marked bradycardia. Minor electrocardiographic changes are common; myocardial infarction is rare. When the patient first regains consciousness he may be mute and unable to move. Burns may be severe but heal remarkably easily. Transient headache and hypertension are common. Fractures of the limbs or skull may occur when the person is thrown to the ground. Most of the reports concern spontaneous recovery. In strikingly few reports was any effort made to resuscitate the person who had been killed. Nevertheless, cardiopulmonary resuscitation and prolonged artificial respiration are important for a person who appears to have been killed by lightning. Furthermore, if recovery occurs, it is usually complete except for possible impairment or loss of sight or hearing. If a group of persons are struck by lightning, attention should first be directed to the dead, as those who show signs of life will in all probability recover even though burns or injuries may need treatment.

NEWBORNS AND FOLIC ACID

SAMUEL K. MORGAN, M.D.

Serum folic acid levels in premature and full term newborn infants are elevated at birth and in the early neonatal period.[1-3] These levels are considerably higher than maternal levels at parturition.[4] The present study confirms these findings and attempts to correlate folic acid concentration with other maternal and neonatal values.

Methods and Materials

Microbiologic assay of serum folic acid activity was performed utilizing *lactobacillus casei* according to the method of Baker[5] and Herbert.[6]

Sterile specimens of cord blood were collected promptly from the placental end of the cord of premature (less than 2500 gm birthweight) and full term infants. Maternal blood specimens were collected at or closely following delivery. In addition to those included in this study, concurrent specimens from normal children and adult controls were assayed.

Results

The comparison between the mean serum folic acid levels of the maternal and newborn groups is shown in Figure 1. The means for both the premature and full term infants are elevated above the normal for our laboratory and the means for both maternal groups. There is no significant difference between the means of the term and premature groups. The means for the maternal groups are below the normal mean for adult non-pregnant females and are not significantly different from each other.

Figure 2 relates maternal folate to infant value levels for premature and term deliveries. Low maternal and high infant levels are seen in both premature and term deliveries. Therefore, the low maternal

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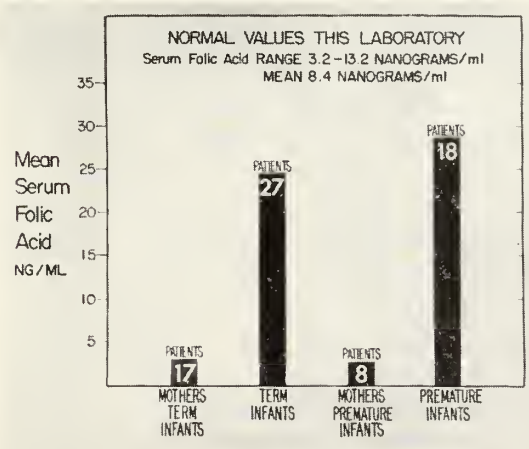


Fig. 1. Relationship of the mean serum folic acid level in the maternal and newborn groups.

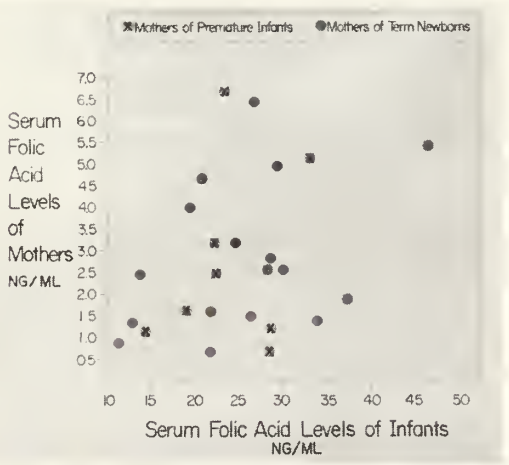


Fig. 2. Scatter diagram of relationship of maternal and infants' folate levels.

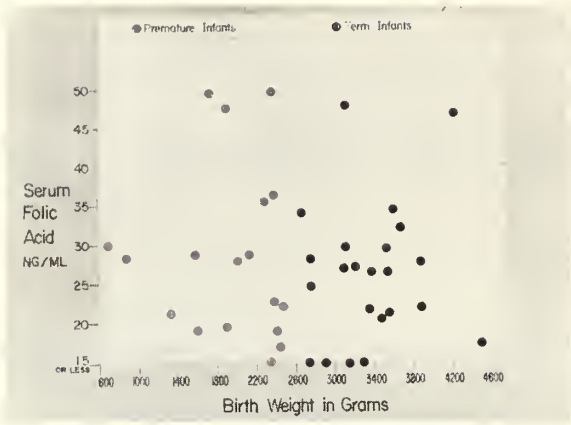


Fig. 3. Scatter diagram showing the serum folic acid plotted against the birth weight in grams of both infant groups.

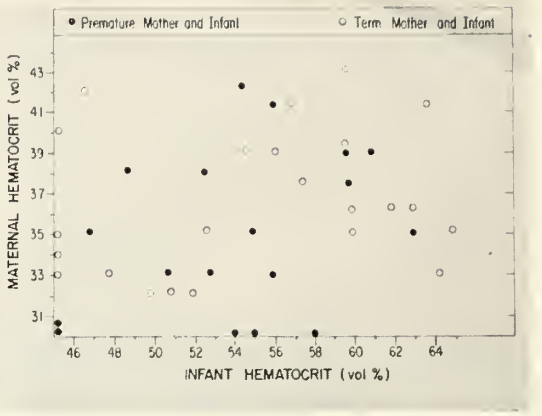


Fig. 4. Scatter diagram of paired maternal-infant hematocrit values.

serum folate activity is probably not an influencing factor in spontaneous premature delivery.

The gestational age of premature infants ranged from 24 to 36 weeks and their weight ranged from 670 to 2460 grams. Figure 3 relates the folate activity to birth weight. It is apparent that there is a lack of appreciable correlation.

Figure 4 indicates the relationship of maternal hematocrit values at delivery with newborn values in paired specimens for both premature and term infants. As is apparent, maternal anemia is not directly related to neonatal anemia.

Figure 5 shows that maternal hematocrit values ranged from 30 to 43 volumes per cent and did not correlate with folate activity (observed correlation coefficient —.029). Since hematocrit alone is not a valid criterion of megaloblastic anemia of pregnancy, the maternal peripheral blood smear and the bone marrow were examined. These specimens did not reveal megaloblastic morphologic changes despite low serum folate activity and regardless of the degree of anemia. Therefore, low maternal serum folate acid activity is not necessarily reflected as megaloblastic anemia. No other studies relative to the maternal hemogram were performed.

Hematocrit values on infant blood specimens ranged from 20 volumes per cent (in an Rh erythroblastotic infant) to 65 volumes per cent. Most were in the normal or near normal range for age, or between 55 and 65 volumes per cent. Peripheral blood smears and bone marrow examinations on the infants were normal.

Parity had no demonstrable relationship with serum folate levels (Figure 6). There was no gradual decline of serum folate with increasing parity.

As shown in Figure 7 there is no significant difference in mean maternal folate levels at parturition by race. The mean serum folate activity for non-white mothers of premature infants is low. The number, however, in this group is too small for adequate statistical comparison. Availability of medical care, adequate diet, and other socio-economic factors may be of importance here.

Discussion

Formation and development of all human cells is dependent on an adequate supply of folic acid. The body's requirement for folic acid is related to the amount of cellular reproduction occurring at any given time. The fetus with its uniquely rapid rate of growth must have excessive demands for folic acid which can be met only through the maternal circulation. Under these circumstances, one might expect to find that maternal and fetal

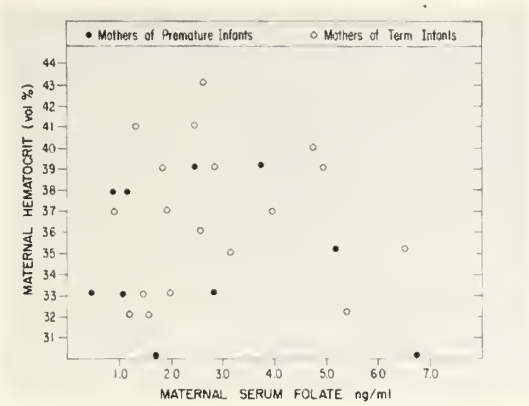
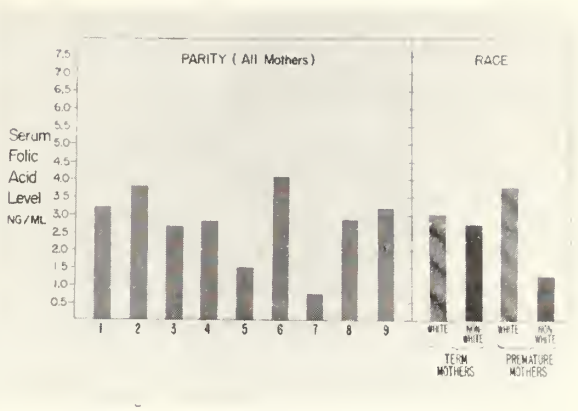


Fig. 5. Scatter diagram indicating the relationship of hematocrit and serum folic acid level on both maternal groups.



Figs. 6 and 7. Parity in all mothers studied. All fall below the mean normal value of 8.4 nanograms/ml and in the low or low-normal range for our laboratory. Mean maternal folate levels at parturition by race.

serum folic acid activity depart from the non-pregnant adult norm. Our studies confirm those of previous investigators[4,7-10], and show that maternal folic acid activity is low early in pregnancy and that cord folic acid activity is elevated in both premature and mature infants. In this series significant elevation was observed as early as 24 weeks gestation. No correlation between both birth weight and folate activity was found.

The ability of the materno-fetal unit to maintain folic acid activity in fetal circulation at 5 to 20 times the activity in the maternal circulation probably assures the rapidly growing fetus a supply of folic acid adequate to meet its needs. Low folic acid activity and megaloblastic anemia are extremely rare in the immediate neonatal period. Even the small premature infants who manifest folic acid deficiency after the first month of life have elevated serum folate activity at birth and apparently develop folic acid deficiency as a result of inadequate dietary intake.[3] Willoughby's[11] finding of an association between folate deficiency in pregnancy and the development of megaloblastic anemia in the child after the first month of life probably reflects exposure of the infant to a folate deficient diet rather than a significant breakdown of the partitioning of folic acid between the mother and fetus.

Maternal protection against symptomatic folic acid deficiency seems less complete. The vast majority of pregnant women do not show hematologic changes attributable to folate deficiency despite their low serum levels. None was found in this study. However, megaloblastic changes are reported in two to four per cent of some obstetric series.[11,12]

Increasing parity which correlates positively with increasing birth weight, and racial differences, which demonstrate lower birth weight (after 36 weeks) and shorter gestation in the Negro[13], were not associated with changes in mean folic acid activity of premature or term newborns or their mothers.

Several authors[4,9] suggest that high fetal demand for folic acid results in lowered maternal stores and causes the occasional megaloblastic anemia of pregnancy. In the absence of differential materno-fetal partitioning, high fetal demand should result in fetal folate activity which is equal to or lower than that of the mother. All reports indicate that this does not occur. Instead, there appears to be a mechanism characteristic of pregnancy which maintains a 5 to 10 fold gradient of folate activity across the placenta and results in a moderate depression of maternal and a marked elevation of fetal serum folic acid. These changes are associated with effective protection of the fetus and

neonate from folate dependent megaloblastic anemia, and some increase in the likelihood of megaloblastic anemia in the mother.

Summary

Maternal, premature and term newborn infants' serum folic acid levels were measured. In keeping with previous reports, the infant folate levels were found considerably higher than maternal levels at parturition. No megaloblastic anemia was identified in the mothers. No correlation was found between birth weight and folic acid levels, between maternal or infant hematocrits and folic acid levels, nor with race or parity and folic acid levels. No correlation between low maternal serum folate levels and premature delivery was found. The existence of a mechanism characteristic of pregnancy which protects the fetus from megaloblastic anemia while somewhat increasing the risk of such anemia in the mother is discussed.

The author gratefully acknowledges the assistance of Drs. William G. Thurman and Milton C. Westphal in the preparation of this manuscript.

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Laryngocele—F. Johnson Putney, M.D. (Charleston), Laryngoscope 78: 749-755, May, 1968.

Laryngoceles are probably more common than the literature indicates. Seven cases were reported, two of which were accompanied by unusual circumstance. The classification of internal, external, and combined is used to denote the location of the laryngocele. The sac may contain either fluid, pus or air, but the basic pathologic process remains the same. The lesion is predominantly found in males and arises from the sacculus of the laryngeal ventricle.

The external approach has practically replaced all other methods of surgical treatment and has the advantage of sparing the vocal cords from injury, trauma or fibrosis which may occur when the interior of the larynx is opened

SYPHILIS SEROLOGY TODAY

ARTHUR F. DISALVO, M.D.*

Today, the most widely used method for detecting syphilis is the VDRL (Venereal Disease Research Laboratory) test on serum or spinal fluid. This serological test for syphilis was explained in a recent paper from the South Carolina State Board of Health.[1]**

The examination is economical and easily adapted for doing a large quantity of specimens. However, it does not determine antibody to *Treponema pallidum* but is a test for reagin, a substance like an antibody that can be readily measured. This system is used because it is practical while sacrificing some specificity. To be highly specific, an antigen of *T. pallidum* is necessary. Due to the nature of the organism such an antigen has not been readily available.

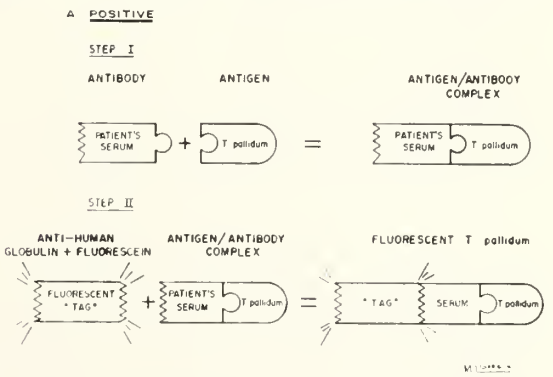
A standard method in a public health laboratory is to use a non-treponemal test (such as the VDRL) as the routine procedure. In certain instances the more specific (and more expensive) treponemal tests are performed. Until recently this was the *Treponema pallidum* Immobilization test (TPI). When physicians requested this examination, the specimens were sent to the National Communicable Disease Center in Atlanta, Georgia where this test is performed. Now the TPI is superseded by the Flourescent Treponemal Antibody-Absorption Test, which is performed at the South Carolina State Board of Health Laboratory in Columbia.

*Chief, Bureau of Laboratory Services and Research South Carolina State Board of Health, Columbia, South Carolina.

**Reprints are available from Venereal Disease Control, S. C. State Board of Health, Columbia, S. C.

Fluorescent Treponemal Antibody-Absorption Test

The fluorescent treponemal antibody-absorption test (FTA-ABS) is the culmination of many years of development of a serological test for syphilis which is sensitive and specific. This procedure is known as an indirect fluorescent antibody staining reaction and resembles the Coombs test. As demonstrated in Figure 1, with a reactive serum, the virulent treponemes (Nichols strain) are "tagged" with fluorescein and become fluorescent.



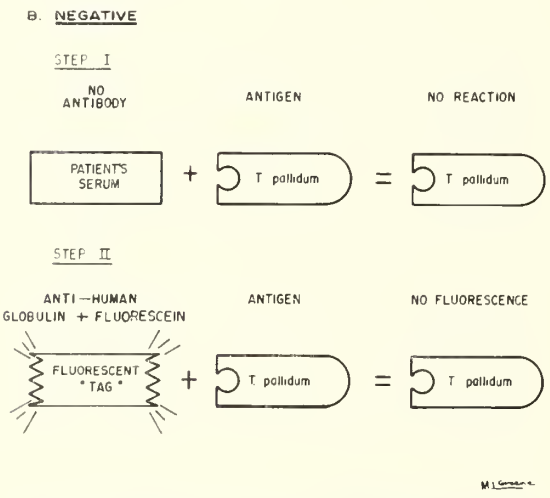
With a nonreactive serum, the antibody is washed away in Step I and the fluorescent anti-human globulin is washed away in Step II (Fig. 2). The treponemes which remain are non-fluorescent. The specificity of this test is obtained by absorbing the patient's serum with an extract of non-pathogenic treponemes (Reiter strain) thus leaving antibody specific for *T. pallidum.*

The exacting requirements of this procedure have not been discussed, however it should be understood that this test requires more sophisticated equipment than

the VDRL and the reaction is visible only under ultra-violet light.

Information Obtained from the FTA-ABS

The main occasion for ordering an FTA-ABS is when there is a discrepency between the clinical impression of the physician and the VDRL report. It is useful in confirming a diagnosis of late syphilis in patients with central nervous system, cardiovascular system or ophthalmological problems when the VDRL test is non-reactive, because reagin titers tend to drop below detectable levels in late syphilis.



The VDRL test may be reactive in several instances when the physician feels a diagnosis of syphilis is not warranted. A normal serum may be reactive if there is any variation in performance of the examination. The proportion of reagents, temperature, time of mixing reagents and time of reading the test are all critical in the proper procedure.

Since the VDRL is not a test for antibody to *T. pallidum*, but a test for reagin, this examination may be reactive in the face of almost irrefutable evidence against syphilis. We then refer to such cases as biological false positive reactions. The biological false positive reaction (BFP) has often been a problem with the VDRL. The BFP may be due to systemic diseases such as drug addiction, leprosy, malaria, non-venereal treponematoses (yaws, pinta, bejel), anemia, blood dyscrasias, collagen disease as lupus erythematosis or autoimmune disease. The VDRL may be reactive for short periods of time due to fever, vaccination or immunization. The FTA-ABS test is specific and does not react in these instances.

The FTA-ABS is of no value in evaluating therapy. The reagin antibodies will progressively decline after therapy and the VDRL may become non-reactive in 1 to 3 months. Treponemal antibodies, however, tend to persist, and the FTA-ABS may remain reactive as long as 13 years after adequate therapy. It is unnecessary to do an FTA-ABS test for CNS syphilis when the spinal fluid VDRL is reactive because a BFP spinal fluid is extremely rare.

The FTA-ABS Report Form

The first section of this form requests information on the patient for identification of the specimen. The second portion requests clinical and laboratory information which is helpful in the interpretation of the results of the FTA-ABS as these factors may have an influence on the reaction. At least two VDRL examinations, 2-3 weeks apart, should be performed before requesting an FTA-ABS. If the second test is non-reactive, with a negative history and physical examination, a diagnosis of syphilis is not warranted, and there would be little reason for requesting an FTA-ABS. An increasing VDRL titer, however, is compatible with a diagnosis of syphilis. If the titer remains static (usually weakly-reactive) a FTA-ABS should be requested. It must be kept in mind that a variation of one two-fold dilution is within the realm of the laboratory error (i.e. a change from 1:16 to 1:8 or 1:32 may not be significant). The laboratory uses the previous VDRL results to help evaluate the overall effectiveness of the FTA-ABS test.

The bottom part of the request form is filled in with the result of the examination by the laboratory. The FTA-ABS is reported as reactive, non-reactive, or borderline. A quantitative test is not performed.

Interpretation of the FTA-ABS

A reactive FTA-ABS with a non-reactive VDRL may indicate either an untreated, adequately treated or inadequately treated patient with late syphilis. If the VDRL was reactive and the FTA-ABS is non-reactive, this probably indicates a false-positive VDRL. In the latter case the physician should look for an underlying cause as mentioned previously in the discussion of BFP.

Occasionally an FTA-ABS may be reported as "borderline". A second FTA-ABS should be performed 2 to 3 weeks later to see if there is any quantitative change in antibody. If the second specimen is also borderline then a TPI may be indicated. Information on the procedure to collect this specimen may be obtained from the South Carolina State Board of Health Laboratory.

General Information

Because of the time and expense in performing this procedure, FTA-ABS examinations are done only once each week, therefore the results are not available as quickly as the VDRL. The South Carolina State Board of Health Laboratory is now doing approximately 1,200 VDRL specimens every day. At a cost of 25¢ each the expenditure is $1,500/week for this one examination. The FTA-ABS costs approximately $2.50 per specimen. As you can see, since there is a tenfold increase in the expense of this examination, certain policies must be established as to when it is performed.

Summary

In summary, the FTA-ABS is a highly specific and sensitive test for antibody to *T. pallidum*. It requires expensive equipment and highly skilled personnel to perform this examination. Because the cost is 10 times that of a non-treponemal test (the VDRL) it is reserved for problem cases.

Indications for the FTA-ABS are: a static weakly-reactive VDRL in the absence of a history or physical findings compatible with a diagnosis of syphilis; when the VDRL is suspected of being a false positive reaction; and in the diagnosis of late latent syphilis.

The information requested on the report form is for the benefit of the laboratory in the constant evaluation of a new diagnostic procedure and must be submitted with the specimen.

For additional information on this subject requests can be made either to the Bureau of Laboratory Services and Research in Columbia or to the Venereal Disease Control Section, Bureau of Preventive Health Services, also in Columbia.

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HEART TRANSPLANTATION:

STATE-OF-THE-ART IN SOUTH CAROLINA

PETER HAIRSTON, M.D.
DALLAS H. DALTON, JR., M.D.
JACK E. ARRANTS, M.D.
WILLIAM H. LEE, JR., M.D.*

Heart transplantation is now emerging from the realm of experimental endeavor to assume the role of an accepted therapeutic measure.[1] There have been to date over 90 heart transplants performed; half of the patients are living. This is a decided improvement over the initial survival rate of renal transplantation and has served to heighten the guarded optimism manifest by most when the first successful heart transplants were achieved.

Virtually every patient who has received a transplanted heart has been studied extensively with emphasis for obvious reasons on immunologic competence and cardiac dynamics. This has resulted in the accumulation of a mass of data which through retrospective analysis now serves as the control or point of reference in directing further efforts in this field.

The ethical, moral, legal, and social storm that was precipitated by Dr. Barnard's first transplant, and which has clouded the milieu of many subsequent transplants, has now largely subsided. The dissident voices raised in protest of heart transplantation as representing "experimentation on human subjects"[2] have either withdrawn to a vantage point of skeptical observation, or as in most cases have acknowledged the tremendous accomplishment that heart transplantation represents. Medical guidelines as statements of policy relating to heart transplantation have been formulated by virtually every medical advisory board, including the Board of Medicine of the National Academy of Sciences,[3] the AMA Judicial Council,[4] and the Veterans Administration Advisory Council.[5] There are in addition published reports relating to heart transplantation representing the opinions of discussion groups and seminars occurring at many major medical meetings, some of which have convened especially to deal with the propriety of heart transplantation.

> **"Courage . . . is the quality that enables the surgeon to assume responsibility for the remote chance of helping the desperately ill patient no matter what the risk. It is the quality that refuses to consider mortality rates or public reaction. It is fearlessness of any consequence except harm to the patient."**
>
> **Edwin P. Lehman (1888-1954)**

Transplantation of the human heart did not occur *de novo;* rather, it has taken place in the wake of a mass of carefully controlled basic animal experimentation covering a period of some 65 years dating from the turn of the century.[6] Criticism has been directed at the inconclusiveness of this data; however, a thorough and unbiased analysis will reveal that even less was known of the fate of renal transplants when this obviously successful endeavor was given clinical trial in 1959. This is of itself inadequate justification for a procedure that embodies such finality; however, in every reported clinical case of heart transplantation the alternative to the procedure has been equally final.

Medical centers around the world are

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now undergoing a thorough self analysis in an effort to determine their respective capabilities in terms of heart transplantation. It is reasonable to assume that this activity is motivated by the desire to afford their patients the best and most modern medical care available. The criticism of "personal aggrandizement" leveled by Dr. Ames, a psychiatrist attending the Capetown Conference could have been applied to practically every major innovative human endeavor in history.[1]

There is a distressingly large patient population with intractable heart disease, a significant number of whom are dying in and out of hospitals daily due to the inability of medical science to aid them short of transplanting a heart. The majority of these patients are seen in centers where open-heart surgery is routinely performed, such as the Medical College of South Carolina, and it is natural that in such an environment the urgency of the matter would be more deeply sensed. An assessment of the capabilities at the Medical College of South Carolina conducted with complete awareness of the guidelines and directives of various governing boards reveals that a state of readiness exists at this institution to offer heart transplantation to a carefully selected patient population. The largest obstacle now present to the initiation of this procedure as a therapeutic modality is a logistic one which relates to the mechanics of accomplishing selection of an appropriate recipient and donor in the same segment of time and space.

The specifics are as follows:

(1) There is at the Medical College of South Carolina an available surgical team with extensive laboratory experience in cardiac transplantation which has demonstrated technical competence and a thorough understanding of the known biological processes that threaten functional transplant survival. Cardiologists and an immunologist, the latter trained in the assay and control of immunologic surveillance, are available to collaborate in the multidiscipline approach.

(2) A systematic protocol of intent has been designed to include all eventualities relating to the patient and donor selection, technical aspects of heart replacement, and postoperative patient care, monitoring of physiologic changes, and data collation for subsequent review. All personnel have been advised of their respective roles and responsibilities so as to reduce or eliminate time-consuming delays in the procedural logistics.

(3) Patient selection according to general concensus will be limited to that group of patients suffering from end-stage heart disease, with coronary artery disease the primary indication at present. No specific contraindications based on coexisting organic dysfunction will be established due to the many discrepancies already encountered in heart transplant patients. The criteria of donor selection will be simply that the donor must have a normal heart and no evidence of any transferable disease. ABO and HLA focus compatibility will be established but may not serve as a deterrent to organ transplantation. Determination of donor death will be based on respiratory and circulatory failure with unequivocal absence of brain stem function.[7]

(4) Control of graft rejection will be managed by attenuation of immunologic competence with ALG (anti-lymphocyte globulin), Imuran, (azathioprine) and steroids. It is realized that there is a considerable depth of knowledge yet to be plumbed in this particular aspect of the problem. Investigation presently taking place at the Medical College will continue with increasing intensity in hopes of offering some enlightment, and new avenues of approach, to the phenomenon of graft rejection.

In summary, the capability for transplantation of the human heart as a means of treating intractable heart disease is available at the Medical College of South

Carolina. There is a thorough realization of the problems attendant upon the endeavor as well as to the present limitations of our knowledge in the realm of graft and host interaction. When these factors are weighed in the balance with the alternatives available to the patient population in question there is not only ample justification for heart transplantation, but a sense of urgency to expedite employment of this therapeutic modality. Cooperation and assistance from the medical community of the state providing access to potentially suitable recipients and donors will be an essential prerequisite to clinical utilization of this expression of modern day surgery.

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Early Management of Battle Casualties in Vietnam— E. L. Jones, A. F. Peters, and R. M. Gasior Arch Surg 97:1-15 (July) 1968

Recent experience in the early management of battle casualties at a 60-bed surgical hospital in Vietnam is reviewed. Distribution of wounds was similar to that encountered in World War II and Korea. Of all vascular injuries treated, reversed autogenous saphenous vein grafts were used most frequently and accounted for 50% of all repairs. Metallic plate or rod fixation of long bone fractures in the theatre of war is generally contraindicated because of the degree of wound contamination. The one exception occurs when there is instability of bone fragments in the presence of arterial injury and movement of the fragments would endanger the graft site. There were three amputations following 31 vascular repairs (9.7%). There were 158 penetrating missile wounds of the abdomen (12.4% of all injuries). The small bowel, colon, and liver were the most frequently injured intra-abdominal organs. Rapid helicopter evacuation and availability of whole blood in the combat zone are the most significant factors in the unparalleled reduction in mortailty and morbidity in this war.

X-RAY FILM OF THE MONTH*

GAS IN GALLSTONES

THE MERCEDES-BENZ SIGN

FRANK H. GRUBER, M.D.**



More exotic than the sports car carrying this emblem is the diagnosis based on this rare sign. For here is an unusual situation whereby the gallstone is shown not by a calcific opacity, nor through its lucent shadow amidst contrast media, but rather through a sharply defined, triradiate gas shadow. The shadow is much like the Mercedes-Benz three-pointed star. Actually, one of the three lines may not be seen, resulting in a sea-gull appearance or, on the other hand, there may be more than three radii.

Gas in the fissured gallstones produces this sign. Of the theories offered to explain this mechanism, the most attractive and the only one supported by any experimental effort is the one presented by Hinkel[2]. Centrally, the gallstone contracts while the outer shell maintains its integrity. Fissures produced by this loss of volume are like those seen in a dry river bed or drying sliced watermelon. If the shell of the stone is left intact, a negative pressure is produced by the fissure, causing a diffusion of gas from the bile through the gallstone into the fissure. Gas diffuses easier than liquid through a crystalline substance. Hinkel[3] placed gas-

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containing gallstones in water with a negative pressure of 10 pounds per square inch above, reversing this theoretical process. In 30 minutes the gas in the gallstone had disappeared. Johnson[4] believes that the gas present in the fissures, rather than being absorbed from gases dissolved in the bile, actually is derived from air which enters the gallbladder from the duodenum through a patulous sphincter of Oddi. Incidentally, gas shadows in the biliary tract are usually associated with chronic cholecystitis and/or cholangitis rather than a fistula.[5] This lends some support to Johnson's theory as the Mercedes-Benz sign has been associated with cholecystitis in all of the cases reported.[1]

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THE WORD WAS GOD

By Robert Quinn, M.D.

In the ages since the Christ was born
Mankind has been with strife so torn
Over what's allowed and what forbidden,
The shocking truths in his words are
hidden.

President's Page



"DISTINGUISHED ALUMNUS"

In the rough and tumble life we live today, men seldom take time to count their blessings, or voice the appreciation of a fellowman unless he becomes a national hero. This is wrong.

Within the ranks of the medical profession in the state of South Carolina, there is a man who would not want to become a national hero. A man dedicated to his upright principles and beliefs; a gentle man, yet firm; a man who has given years of his time to the preservation of our profession's past. He has given equal time to the forward progress of medicine and the Medical College. His wisdom, his knowledge, and his sound advice have been graciously offered to all of us at one time or another. Because of him, we are linked to the past and looking to the future.

We have now come to "a pause in the day's occupation" to honor this man; and voice, all too briefly, our longfelt appreciation of him. Of what he is, what he has done and is doing for us, both as individuals and as members of our profession.

THIS MAN IS DR. JOSEPH IOOR WARING OF CHARLESTON.

To show but a small measure of our deep appreciation of him, the Board of Trustees of the Medical College of South Carolina has voted unanimously to name the Historic Library at the Medical College, now known as the Hoffman Library, the Waring Historic Medical Library. To this small measure of appreciation has been added a well deserved accolade by the Alumni Board, "Distinguished alumnus".

In the Waring Historic Medical Library, which Dr. Waring built up almost single handedly with very limited funds, are many rare books—without bindings. Again let us "Pause in the day's occupation." Are you proud of your profession? Are you desirous of preserving the history, records and implements of your profession for your children and children's children's awe and wonder? Then let us face reality.

Those rare books need tender, loving care. Those records and implements need protective cases. You can become a part of the Waring Historic Medical Library by showing that you are mindful of the need for future doctors to be able to share in the history of medicine. In plain words, money is needed. Recall all those who have lived before us, and who by leaving histories and records have contributed so much to help us.

Your name on a bronze wall plaque in the Waring Historic Medical Library will make you a part of it for the ages to come. You can insure this by simple procedures—any old, historical medical books, records and implements in your possession can be sent to "Health Sciences Foundation," Medical College of South Carolina, earmarked for the Waring Historic Medical Library, 80 Barre Street, Charleston, South Carolina. The most urgent need, of course, is money, and it is tax deductible. We, as individuals, should be more than willing to do our part in contributing to, and maintaining for posterity, the history of medicine.

AVE, JOE WARING!

Joel Wyman, M.D.
President

Editorials

Prosperity At Last for the House Officer

For those few surviving physicians who can remember when the compensation for a hospital house officer consisted of rather poor quarters, monotonous and somewhat doubtful quality of food, and a few hand-me-down uniforms, along with the opportunity for learning in spite of the scut work, the present state of affluence of interns and residents seems fantastic. Interns in some of the larger municipal hospitals receive salaries up to $7,500 and fourth year residents may reach the $10,000 figure, with added fringe benefits amounting to a considerable sum.

In New York a "union" of house officers has brought about an extensive pay raise for some 15,000 physicians. This collective bargaining has proven so effective that it is more than likely to spread to other areas. Obviously the money to meet these increases in salary must come from two sources, either the patient, whose room rates must be increased, or indirectly from the tax payer through some federal program. Predictions are that New York's voluntary hospitals will soon be charging the patient $100 a day.

Time and attitudes change. It is hard to believe that the present house officer is worth thousands of times more than his counterpart of the old days.

Medicine and the Socio-Economists

The voices of the many people determined to make medicine over in their severally conceived images become more audible and more strident. Many of them are inclined to regard the recognized defects of the medical mechanism as due entirely to medicine and its practitioners. They are ready with elaborate schemes for revolutionizing our whole professional activity. The lone practioner is consigned to limbo, and multiple schemes for building up group practices are aired daily. The thinking physician not only views with alarm these varied threats to his continuation in a kind of existence which he finds not unappealing, but also must be ready to answer, deny, amend, or improve upon the various schemes currently circulating. The unfortunate apathy which many physicians exhibit in the face of real threats to their way of life is as obvious as usual. How can these people who should be chiefly concerned be aroused?

Elsewhere in this issue a member of our profession reports his impressions from a relatively recent meeting entitled the Second National Congress on the Socio-Economics on Health Care. His observations are sharp and pertinent. All physicians would do well to take heed of this report and what it portends. The criticisms and proposals are very real; they are gathering strength and variety and must be met with some reasonable answer from the profession. How to get the physician vitally interested is a problem.

Time Changes All, Including the Air

Half a century ago when the flu was rampant the advice given by an eminent public health authority to the public was "keep your windows and your bowels open." He had little to offer in the way of specific treatment, and indeed we have not much more now.

However there has been a little reversal in attitude in the passage of 50 years. We read in a bulletin of an organization eminent in its interest in respiratory ailments that "if you suffer from a respiratory ailment or heart condition—remain indoors with the windows closed." We would wonder if that stuffy indoor air is much better for the respiratory tract than that polluted atmosphere outside or is it just as polluted? After all, perhaps pollution isn't yet so universally intense for us South Carolinians that we can't breathe

with reasonable safety to the linings of our lungs, especially if we live near any of the great open spaces.

Letter To The Editor

Dear Dr. Waring:

I have just returned from a postgraduate course in Internal Medicine sponsored by the Department of Medicine of the Medical College. The course was most instructive, enjoyable, and appropriate in its application to clinical medicine. It was most amazing to me to see such a program put on by young men at the Medical College who have, despite the recent difficulties in leadership of departments and indeed deanship of the College itself, persisted in their knowledge and clinical investigation with abilities and performance unsurpassed in any other educational institution in the country. We are proud of our Medical College and we are proud of those who "keep their eye on the ball" despite the distractions, confusion, and disturbances on the sidelines.

N. B. Baroody, M.D.

50 YEARS AGO

The Journal of the South Carolina Medical Association

December 1918

An editorial noted that it was "highly important that the County Society, now that the war is over, resume active work at once."

THE DOCTOR AND THE SOCIO-ECONOMISTS

A report on the Second National Congress on the Socio-Economics on Health Care Meeting in Chicago, March 22-23, 1968.

The goals of the Congress were to explore and discuss the public demands for improvement in delivery of medical care to the general population and the adjustments required of the medical profession to meet these demands. This was a very abrasive meeting as far as the physicians are concerned, as many speakers were outside of the medical profession and in a nice way pulled no punches in their criticism of present methods of medical practice and their threats of what is to come if extensive socio-economic changes are not made in the delivery of medical care. Private solo practice was almost ignored and the only methods of practice considered and acceptable were the different types of group practice, as the economically oriented speakers considered this the most efficient and productive type.

The keynote speech was given by an economist who forcefully presented the public demands for an equitable health service with the threat of government interference if the profession did not readjust and deliver this voluntarily. However, his attitude was that government financing should be only for the unemployed poor and medical care of underprivileged children with employer type of insurance covering everyone else plus private coverage over and beyond a basic coverage. He offered the following propositions:

1. Finance medical insurance through employers.

2. Permit anyone to buy more than the minimum required health insurance coverage if able to.

3. The government to pay for insurance only for the unemployed poor.

4. Special attention to medical care of children.

5. That physicians must accept the demanded changes of technology, economic pressure, and shifting of social and political attitudes.

Six representative types of group practice were presented under the following headings: Single specialty group; private multi-specialty group; prepayment group; institutionally-based group; health campus or private offices grouped together; and so-called group practice without walls which is a central hospital with several outlying clinics.

The non-physician speakers were made up of economists, medical and lay educators, insurance and hospital administrators, public health and government officials, industrial technologists, labor and management representatives, besides representatives of the American Medical Assn. Private practice, fee for service system, lack of around-the-clock emergency and non-emergency service, and high cost of medical service were criticized and the reasons discussed. Speakers from management and labor were very specific and overt in presenting their side of the demands. They forcefully expressed the opinion that since they were putting so much money in health coverage they were entitled to and were demanding more participation in planning, more orientation and consideration of their personnel, a higher quality medical care given equitably to all financial catagories of personnel and their families, as well as adequate and efficient delivery of this high quality medical care at a reasonable price. All speakers felt that the medical profession must take a lead in health planning locally as well as statewide and nationally or the public will demand legislation which may reduce the medical profession to a vocation.

Most professional and lay speakers enforced the idea of more efficiency and greater production by better organization, use of more well trained ancillary personnel, and modern methods of busi-

ness and industry to step up the unit production of physicians and hospitals.

The two major dissenters were the president of the Ohio Medical Society and the president of the American Medical Association. The Ohio Medical Society President condemned labor and HEW for the impending socialized medicine takeover. Dr. Rouse, the President of the American Medical Association, closed the meeting by attacking the critics who distort the facts about the medical profession, admitted that the medical profession was behind in some aspects of progressive overall medical care but that it took time to adjust to this over-whelming problem. He noted that many of these socio-economic problems were not the business of physicians, such as poverty, unemployment, racial prejudice, ghettos, dietary deficiencies and environmental flaws as well as medical cost inflation by the government and labor groups. He asked for time to develop this new leadership.

The crux of the whole meeting was indicative of the fact that the present method of medical service delivery is unsatisfactory to the general public and that a change must be made or legislative action will forcefully bring it about.

R. K. Charles, Jr., M.D.

GIFT OF THE PAST
By Robert Quinn, M.D.

With these few words may you recapture
One moment of your childhood's rapture
When simple faith, warm hearth, bright fire
Brought, Christmas morning, heart's desire.

FOR RENT

Suite of Doctor's offices, on first floor, with on premise parking available November 1st. Suite consists of large waiting room, nine private offices, equipped with central heating and cooling. Utilities and jantor services furnished. Located one block from Columbia Hospital and five blocks from Baptist Hospital, 1420 Gregg Street, Columbia, S. C. 29202. Write or call John H. Young, Jr., P. O. Box 67, Columbia, S. C. 29202. OND

County Medical Society Officers Meeting Planned

A one-day meeting similar to those held in recent years will be held in Columbia in February, on a Sunday not yet determined. The program is incomplete, but subjects of general interest to the profession will be discussed. In previous years they have included Blue-Cross-Blue Shield, Medicare, Medicaid, Health Insurance, the Regional Medical Program, AMA activities, the Legislative Scene and other pertinent matters. This year similar subjects will be under discussion.

These meetings are open to all interested persons, not only the society officers. The invitation is general to our membership. The Association provides a luncheon.

A more definite announcement will be made later.

Report Made to Council of the South Carolina Medical Association by the Medical Service Committee

Study has been made of the methods by which charity patients are cared for in the various counties of the state and a copy of this is being presented.

An Analysis of Methods for Charity Patients in the Various Counties of South Carolina

There are three counties which do not have an organized County Medical Society—

	Population (1960 census nearest 1000)	No. of Doctors in County [( ) Not in private practice]	
Jasper	12,000 (Has a hospital)	4	
Lee	22,000 (Has a hospital)	5	(1)
McCormick	9,000 (No hospital)	2	

There are two district societies which include three counties—

Edisto District			
Bamberg	16,000 (Has a hospital)	9	
Calhoun	12,000 (No hospital)	4	
Orangeburg	69,000 (Has a hospital)	50	(1)
Ridge District			
Edgefield	16,000 (No hospital)	9	
Lexington	61,000 (No hospital)	19	
Saluda	15,000 (No hospital)	3	

There are five counties which do not have a hospital—

Calhoun	12,000	4	
Edgefield	16,000	16	
Lexington	61,000	19	—Hospital under construction
McCormick	9,000	2	
Saluda	15,000	3	

The following counties have neither an organized general outpatient charity clinic nor inhospital organized charity service. In these counties the individual physician serves the charity patient in his office and in the hospital. A number of counties have a Well Baby, Venereal Disease, Cancer, Birth Control or Heart Disease Clinic attended by a county health officer or a local physician—

	Population (1960 census nearest 1000)	No. of Doctors in County [( ) Not in private practice]	
Abbeville	21,000	6	(1)
Allendale	11,000	3	
Anderson	98,000	82	(2)
Bamberg	16,000	9	(9)
Barnwell	18,000	10	(1)
Beaufort	44,000	15	(2)
Calhoun	12,000	4	
Cherokee	32,000	14	
Chester	31,000	13	(1)
Chesterfield	34,000	13	
Clarendon	29,000	7	
Colleton	28,000	11	
Darlington	52,000	23	(1)
Dillon	30,000	11	
Dorchester	24,000	8	

Edgefield	16,000	9	(1)
Fairfield	21,000	6	(1)
Florence	84,000	76	(3)
Georgetown	35,000	17	
Hampton	17,000	8	
Jasper	12,000	4	
Kershaw	34,000	25	
Lee	22,000	4	(1)
Lexington	61,000	19	(1)
Marion	32,000	23	(1)
McCormick	9,000	2	(1)
Newberry	29,000	16	(1)
Orangeburg	69,000	50	(1)
Pickens	46,000	22	
Saluda	15,000	3	
Sumter	75,000	42	(2)
Williamsburg	41,000	14	

Four counties have a general charity outpatient clinic but no organized inhospital charity service—

Berkeley	38,000	6	(1)
Horry	68,000	47	(2)
Marlboro	29,000	16	(1)
Oconee	40,000	24	

(In Marlboro the attending physicians receive some remuneration; in the other counties they do not).

Five counties have organized charity inhospital services but no charity outpatient clinic—no physicians receive remuneration—

Aiken	81,000	42	(2)
Lancaster	39,000	19	(2)
Laurens	47,000	17	
Union	30,000	9	
York	79,000	55	(1)

Five counties have organized charity general outpatient clinics and inhospital services—

Charleston	216,000	275	(150)
Greenville	210,000	218	(30)
Greenwood	44,000	48	(2)
Richland	200,000	247	(100)
Spartanburg	157,000	140	(6)

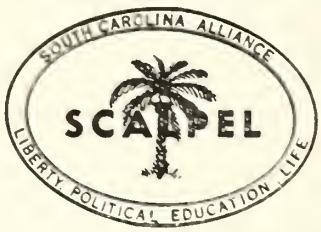
In Greenville, Greenwood and Spartanburg none of the physicians caring for the charity patients receives any remuneration. In Charleston and Richland counties most of the physicians attending the charity patients receive financial compensation.

A. Izard Josey, Chairman
Medical Services Committee of the
South Carolina Medical Association

Recommendations:

1. That all counties not having an organized society affiliate themselves with a neighboring county.
2. All counties or associated county societies with a population of 30,000 or more develop an organized charity outpatient clinic and inhospital service.
3. That the Council and officers of the South Carolina Medical Association develop plans for the above recommendations. Considering the changing attitudes in the doctor-patient relationship it is suggested that the physicians attending charity patients be recompensed on a salary basis by the local county government.
4. That there should be more cooperation between the practicing physicians in all counties and the activities of the State Board of Health and its local county units in establishing outpatient clinics.
5. Attention be directed to the report of Dr. Roland Charles incorporated in his summary report of the proceedings of the Second National Congress on the Socio-economics on Health Care, American Medical Association, held in Chicago March 22-23, 1968.
6. Attention of Council and the membership of the South Carolina Medical Association be directed to South Carolina State Law (R1062, H2459) March 19, 1968, cited as "State Comprehensive Health Planning Act."

7. Attention of the Council and membership of the South Carolina Medical Association be directed to the formation of the South Carolina Health Forum which held an organizational meeting on July 9, 1968, in the South Carolina Health Department in Columbia, presided over by Dr. E. Kenneth Aycock. This is an organization to act in an advisory capacity to implement the aforementioned South Carolina law enacted to comply with Public Law (United States Congress) 89-749. This Forum consists of people interested in public health, such as physicians and laymen involved in various activities of public health; such as hospital administrators, pharmacists, social workers, members of various health organizations such as tuberculosis, heart, cancer, etc., public health workers and others interested in the public at large with no association with any health organization but representative of consumers of medical care. The Forum consists of 92 members, 12 of whom are physicians. It should be recognized that this Forum will be influential in the future planning and directing of the methods of provision of medical care in South Carolina.



MEDICARE IS HERE! MEDICAID IS HERE! THE ELECTIONS ARE OVER! ??WILL THE PRIVATE PRACTICE OF MEDICINE SURVIVE??

Below are excerpts from an article entitled "Labor Urges Group Practice Pre-Payment Plans to Halt Rising Medical Costs" in the November issue of The Carpenter, the official publication of the United Brotherhood of Carpenters and Joiners of America:

"There is only one ultimate answer to this problem—national health insurance, which has long been the AFL-CIO goal.

"The AFL-CIO does not believe that Congress established the Medicare and Medicaid programs or that unions have sacrificed to win health protection for their members to enrich physicians and other providers of medical care."

"The decisions of physicians largely determine hospital cost. The physician decides whether a patient goes to a hospital or receives much less-expensive but often equally or more effective treatment on an out-patient basis.

"Old-fashioned, fee-for-service solo practice is out-date, inefficient and excessively costly.

"Reimbursing physicians on a usual and customary fee basis invites fee escalation because fees are unilaterally determined by doctors.

Labor's study of medical costs suggested these specific steps for reducing the cost while maintaining the quality of medical care:

"1. Promotion of the fastest possible growth of comprehensive group practice prepayment plans.

"2. Encouragement of more efficient utilization of the supply of doctors, nurses and other health personnel including adequate opportunities for training and promotion at all levels.

"3. Payment of medical care on a capitation basis: that is, an actuarially determined amount paid at periodic intervals covering total health care. Capitation payments should cover not only physician services but hospitalization, extended care and home health services as well.

"4. To the maximum extent possible physicians, especially hospital based physicians and the heads of various medical departments, should be made administra-

tively responsible to the hospital.

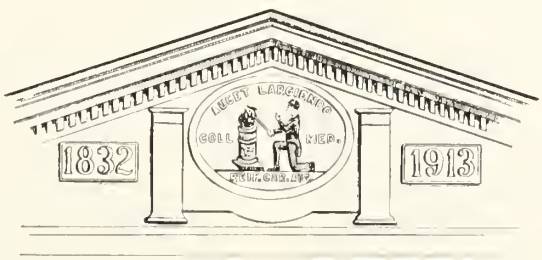
"5. Reimbursement of hospitals on the basis of average cost for all hospitals in similar circumstances thereby rewarding the efficient and penalizing the inefficient.

"6. The artificial distinction in medicine between the method of financing physicians services and hospitalization should be eliminated by establishing a single system of financing both, requiring no additional out-of-pocket payment from beneficiaries.

"7. The Food and Drug Administration should have the authority to evaluate the relative effectiveness of drugs. On the basis of such objective scientific and clinical information, this information should be made available to physicians and hospitals in an official governmental or government approved generic name formulary which would indicate the most appropriate drug for different diseases."

It is vitally important that all physicians support our State and National Political Action Committees (SCALPEL and AMPAC) in the crucial years ahead.

A statement will be mailed from the State Medical Association Office at Florence early in the new year. Dues for 1969 are $20.00. The cost is cheap—the rewards can be many.



Medical College of South Carolina

More than ninety physicians from throughout South Carolina and bordering states attended a recent Postgraduate Seminar on Internal Medicine, held in the Medical College.

John A. Moncrief, M.D., has been appointed Professor of Surgery and Director of the Cancer Clinic at the Medical College of South Carolina.

Dr. Moncrief is the former director of the U. S. Army Surgical Research Unit at Brooke Army Medical Center, Fort Sam Houston, Texas.

Meeting

The American College of Physicians will present a program on Hormonal Regulation in Health and in Disease January 20-23, 1969 at Columbia University College of Physicians and Surgeons, 630 West 168th Street, New York, N .Y.

Send all registrations and requests for more information to: Dr. Edward C. Rosenow, Jr., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.



Dr. John Hal Jameson of Easley has been re-elected to active membership in the American Academy of General Practice. **Dr. M. G. Whitlock** of Trenton was honored this fall on his 85th birthday by his friends and former patients. **Dr. John H. Boulware** has begun general medical practice in association with **Dr. R. W. Patton** of Rock Hill. **Dr. Gerald E. McDaniel**, a native of Honea Path, has recently retired from the staff of the S. C. State Board of Health. New officers of the South Carolina Obstetrical and Gynecological Society are **Dr. J. Richard Sosnowski**, president; **Dr. Willard C. Hearin Jr.**, president-elect; **Dr. Harwood Beebe**, secretary-treasurer, and **Dr. Mary E. Blanchard**, secretary-treasurer elect. The next annual meeting of the Society will be held Oct. 3-4, 1969 at Hilton Head Island, S. C.

Dr. W. F. Ward Jr. has returned to the general practice of medicine at 3014 Platt Springs Road in Springdale. He has recently completed a two-year tour in the Medical Corps of the United States Army. **Dr. Hans J. Heller** has announced the opening of his office for the practice of general medicine and rehabilitation medicine at 134-B Rutledge Avenue, Charleston. **Dr. Ambrose G. Hampton Jr.** of Columbia, chairman of the S. C. Heart Association's Cardiopulmonary Resuscitation Committee, was speaker at the committee's workshop held in Greenville this fall. **Dr. Hazel King** of Florence was medical director for a tri-county cancer clinical service designed to detect cervical cancer in women in the Darlington, Florence and Marlboro area this fall.

Dr. E. Kenneth Aycock, state health officer, addressed the Greenville County Medical Society at a meeting this fall. **Dr. Prentiss McLeod Kinney** was presented the Bennettsville Lions Club's first "Citizen of the Year" award recently. **Dr. Colquitt Sims Jr.** of Anderson is the new president of the South Carolina Pediatric Society. **Dr. Lewis M. Jones** is now associated with **Dr. William R. Ameen** in the practice of general medicine in Greenwood. Their offices are 1132 Spring Street. **Dr. M. B. Nickles Jr.** has been elected chief of staff of The Byerly Hospital in Hartsville. **Dr. Herbert B. Niestat**, an orthopedic surgeon formerly of Passaic, N. J., has joined the Moore Clinic in Columbia as an associate.

Dr. James E. Padgett has returned to the State Board of Health as assistant chief of the Bureau of Personal Health Services after receiving the master of public health degree at the University of North Carolina where his major work was in maternal and child health.

Dr. Roland W. Penick has returned to his post as health officer of the Greenville County Health Department after receiving the master of public health degree at the University of North Carolina. His major work was in maternal and child health.

New Fellows of the American College of Surgeons

Robert T. James, M.D., Anderson
Peter Hairston, M.D., Oliver C. Mitchell, M.D., Charleston
James C. Hughes III, M.D., Conway
William E. Bomar Jr., M.D., Thomas C. Mann, M.D., Frank R. Wrenn, M.D., Greenville.

THE MOODY REPORT

E. KENNETH AYCOCK, M.D.
State Health Officer

The Moody Report has been labeled as "a blueprint for progress" and as such is interpreted by me to be a blueprint for economic progress in the State. It is in particular not a comprehensive health plan for South Carolina. It does not take into consideration many of the important and vital issues such as the total health needs of our people or many other pressing related problems.

The Moody Report states that for economic growth to occur in South Carolina, we must improve the quantity and quality of flow of students into our high schools, technical education schools, colleges, and universities of higher learning. Its central thesis is that a better educated population can do higher quality work and this will attract the more highly specialized industries that provide the higher paying jobs. Right now, South Carolina graduates from high school about half the number of students who entered first grade 12 years before. The nation graduates two-thirds. South Carolina sends only one-sixth of the college-age group to college, while the average state sends two-sixths. This means that we are operating at half the level of the nation—and that one fact says a lot about why our income is so much lower than the rest of the nation.

To start the improvement in quantity and quality of flow of students, the Moody Report recommends starting at the beginning with a universal system of state-supported pre-school and kindergarten classes. Moody's educational experts assure us that no serious student of the field will contradict the statement that half the child's learning capacity or intelligence is developed before he is five years old and that if he is deprived of desirable learning experiences before age five, no amount of wonderful education after that can make up for the lack. Therefore, the Moody Report so strongly recommends that the child attend pre-school and kindergarten because it gives him a start in the world of education that is extremely important to his subsequent achievement.

I interpret the Moody Report as stating that the key factor to the improvement of all the many needs of South Carolina is to improve its economic growth—to improve its economic growth through the improvement of its productivity. This can be accomplished by increasing both numbers and quality of people available for employment, or more specifically, by increasing the knowledge and understanding of our people in order that they may in turn gain better employment. Through gainful employment, they can increase the productivity of South Carolina and, hence, lead to its economic growth. By and through improvement of the education system in South Carolina, according to the Moody Report, South Carolina will be able to close the economic gap between it and the rest of the country. The financial benefits resulting from an increased economy will provide additional funds for meeting the other pressing needs not included in the report.

I shall not labor the pros and cons of the educational aspects of the Moody Report

but will center my remarks briefly upon the health aspects of the Report. However, the demands for a qualified staff and the need for higher education to train manpower are acutely felt by all of us in the business of providing services to people.

As regards health, it would appear that health assumes an incidental role in the "blueprint for economic progress in South Carolina." The Moody Report recognizes the need for healthy people in order to have a healthy economy. The Moody Report also considers the contribution of the total environment to the health of the people. Most health professionals focus their immediate responsibility on disease, but the fate of the population itself is closely intertwined in issues that have not been identified primarily as health issues. Health cannot be considered apart from the environmental, social, and economic influences which have such a profound effect on health. Personal and environmental health services are inextricably intertwined. The Moody Report recognizes that one lives in an environment of things and people and that much of man's health is dependent upon the quality of his relation to his environment. Although it is not stated in the report, it is implied that the access to work and job security are as essential to man's health as access to a physician or hospital.

With these concepts I must in essence concur, and indeed a close look at the health statistics of South Carolina makes it extremely difficult to decide just what *would* have the greater positive effect on the health of the people of our State. Should we spend our limited state funds on the improvement of health education of the individual and provide those educational opportunities which would improve the productivity of the State and the economic level of its people? Or should we stress an improvement in the health manpower resources through the education of a greater number of highly skilled physicians? These are questions which I am not in a position to answer at this time since all the facts are not yet known or available.

However, as regards the Moody Report and the socio-economic improvement of the people of South Carolina, I would have to concur that a health input at the lower end of the scale, using paramedical personnel as opposed to highly skilled physicians, would indeed improve the health of the people who are in most need of upgraded health care. These are the people who represent a drag not only on the health statistics of the State but on the educational and economic statistics as well.

Although information concerning the total health needs of South Carolina is at the present limited, the State Board of Health through its Office of Comprehensive Health Planning is undertaking the responsibility of accumulating data in this area. It is my personal impression that malnutrition—either in the form of obesity, undernutrition, or intestinal parasites—is one of our greatest health problems in this State. High on the list of health problems are dental care and mental illness. The leading causes of death in South Carolina are heart disease, cancer, stroke, diabetes, pneumonia, tuberculosis, syphilis, and influenza. A recent study undertaken by the State Board of Health showed that South Carolina experienced an excessively high number of deaths due to tuberculosis, cancer, diabetes, cardiovascular-renal diseases, influenza, pneumonia, and cirrhosis.

The traditional method of meeting health needs has been largely that of providing more providers of health services, be they physicians, hospital beds, nurses, etc. Until very recently, few persons engaged in health services other than public health workers concerned themselves with the true causative factors of many of our diseases or health hazards. A recollection of yesterday's health problems of yellow fever, typhoid, diphtheria, scarlet fever, polio, etc., will serve to illustrate that the breakthrough in the control of these dis-

eases was due chiefly to the planning efforts of public health.

Realizing our extremely limited resources and our total inability to ever produce enough physicians to meet all the health needs of South Carolina, I as state health officer must recommend or seek alternate ways of meeting the State's health needs. I would favor the realignment of existing resources into the development of a better system for the delivery of health care. Such a system would of necessity be different for many areas of the State, hence the concept of the 13 health districts for South Carolina. Out of the 13 health districts could come planning under the leadership of local physicians and persons interested in health which would meet the health needs of their communities.

In addition there must be an enlargement of the paramedical field in order to achieve improvement or relief in our health needs in a lesser period of time. A great many young people are interested in the paramedical professions. Most students of the health manpower situation are looking to the allied health professions—those now existing and those innovative roles to be created—for great assistance in extending the physician's arms and time.

Many of the things which I have touched upon remain to be determined and elaborated upon in depth by the State Advisory Committee on Comprehensive Health Planning. It is the responsibility of this State Advisory Committee on Comprehensive Health Planning to determine ways and means of meeting the total health needs of South Carolina. The Moody Report recognizes only one—the need to raise the lower level of health care, that is, the health needs of those persons in the lower socio-economic strata.

This, it says, can be accomplished best through the use of paramedical personnel and public health efforts. To this I would add paramedical personnel working within an organized framework for providing health care (i.e., hospital, private physician's office, group practice, or public health agency) and better organization of existing resources within the framework of the 13 health districts as proposed by the Comprehensive Health Planning Advisory Council, beginning at the local level and coordinated on a state level.

The Moody Report recommends that this be accomplished through the improvement of the existing State Board of Health and through the improvement of the Medical College at Charleston and its School of Allied Health Services by affiliation with the University of South Carolina. The Report concludes that the cost of establishing a second medical school at present is prohibitive for South Carolina and that, as the Medical College now suffers from an unenviable reputation among its peers in American medical education, the resources must be concentrated for the present on a major strengthening and upgrading of it to the point where it can perform the important role required of a medical college.

The Moody Report recognizes that it is essential that health planning be closely attached to operation and that there be a direct line of responsibility between planning for health services and the implementation of programs to meet health needs. Furthermore, the Moody Report places strong emphasis on the involvement of the private sector—private medicine, private hospitals, private industry, the general public citizenry—in a coordinated statewide effort for the improvement of the health of the people of South Carolina.

As stated earlier, I do not consider the Moody Report in any manner a total comprehensive plan for South Carolina. It has not set forth a plan meeting the total health needs of our State. The health program set forth in the Moody Report is only secondary to that of an educational program upon which the economic growth of the State is based. As has been emphasized throughout the Moody Report, it states that the root of all the State's

growth is in the public schools which, properly nurtured, will turn out larger numbers of better qualified students for industry, technical education centers, colleges and universities, and the Medical College.

How the limited problems recognized and solutions offered by the Moody Report can be evaluated against the many other pressing needs of the State, and how the apparently insurmountable problems facing us can be resolved within the limits of our resources are matters which concern us all.

Ossifying Fibroma of the Sinuses—Frank W. Young, M.D. and F. Johnson Putney, M.D. (Charleston), Ann Otol, 77:425-434, June, 1968.

The true nature of ossifying fibroma is undetermined and it is considered either a monostotic fibrous dysplasia or a variant thereof while there is additional evidence to suggest that it may be an entirely separate lesion formed by the neoplastic proliferation of young osteogenic connective tissue cells in the marrow spaces of the spongiosa.

Clinically the lesion is a benign process occurring as a painless swelling of the face usually in adolescent females and the maxilla is more often involved than the mandible. The radiographic appearance varies with the amount of osseous tissue that is present and those with less osseous elements may have the appearance of a bone cyst. The preferred treatment is surgical excision which is as conservative as possible consistent with total removal of the lesion since recurrence is not unusual if the lesion is incompletely excised.

REPORTING VENEREAL DISEASE

Recently, a resident at one of the nation's leading hospitals diagnosed dark-field positive, primary syphilis in a young man. Immediately after the diagnosis was made, the doctor telephoned his local health department to report the case and request epidemiologic assistance. The patient was interviewed that same day by a trained venereal disease health department representative. As a result of the interview, five sex contacts were located and examined. In one, secondary syphilis was diagnosed at the local health department clinic. This infected patient, in turn, was interviewed for her sex partners, and in three additional young men diagnoses of either primary or secondary syphilis were made, while a fourth was found to have been previously treated for primary syphilis by a private physician—the private physician had not reported the case to the health department.

When the medical history of this unreported patient was studied, it became apparent, from reviewing the patient's onset of symptoms and his dates of sexual exposure, that his was the first case of syphilis in this particular outbreak. If the private physician had reported the case and requested case-finding assistance, there is an excellent possibility that this chain of syphilis infection would never have gained momentum.

I wish I could say that the above situation is a rare one. The evidence indicates that it is not. In a communication in this issue (p 941) Cleere and associates examine the reasons behind the private physicians' lack of complete reporting. Their article is not a scathing denouncement of physicians' practices, nor do the authors chide physicians for not reporting all their VD cases to their local health departments. If the communication tells anything, it tells us that physicians as a group are highly intelligent professionals who carefully weigh their decision to report. I think physicians in private practice should read this communication carefully and reexamine their own attitudes toward reporting sensitive medical conditions of community concern.

An excellent example of the importance of cooperation between private medicine and the public health was described previously in THE JOURNAL. We, in public health, of course, hope that physicians will report and permit interviewing, and that they will agree with Milford O. Rouse, M.D., who made the following statement at a Conference of VD Control Officers and Senior Public Health Advisors in New Orleans, Jan 10, 1967:

> Venereal disease reporting and investigation is as important as other medical problems that overlap the public domain, such as narcotic addiction, abortion, poisonings, knife and gunshot wounds, and battered children. And it requires the same kind of cooperation by the physician.
>
> Physicians resist the requirement that they report venereal disease cases because they consider it a breach of confidence to reveal an illness without the patient's consent. They also find it distasteful to their patients. But patients must be taught—by their physicians—that it is essential to their health, and to the welfare of their sexual partners, that reports be made.

Physicians will not be made to report by regulation. In the final analysis, the physician himself must make the decision to report and permit interviewing. In the communication by Cleere et al, the physician can see if his attitudes toward reporting are similar to those of his colleagues. Physicians have some excellent reasons for not reporting, but each physician must ask himself if these reasons are good enough to risk the health and welfare of an entire community.

WILLIAM J. BROWN, M.D.
Atlanta

JAMA 202:981-982

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Dr. F. E. Zemp died October 24 in Columbia.

A Columbia physician for more than 30 years, Dr. Zemp was born in Camden in 1897, the son of Dr. Frank Zemp and Katherine DeLoache Zemp.

A graduate of The Citadel, he received his degree in medicine from Jefferson Medical College, Philadelphia, Pa., in 1924 and following graduation was resident physician at Protestant Episcopal Hospital in Philadelphia.

He also did postgraduate study at the Psychiatric Institute, Morristown, N. J., at Massachusetts General Hospital and at the University of Vienna.

In addition to maintaining an extensive private practice, Dr. Zemp served at various times as chief of medical service, chief of staff and consultant at Columbia Hospital, and as chief of staff and chief of medical service at Providence Hospital in Columbia.

Dr. Zemp belonged to the American, Southern and South Carolina Medical Associations, the Columbia Medical Society and the Columbia Medical Club. He also held membership in the American College of Physicians, the American College of Chest Physicians and the American Heart Association.

Active in Columbia civic, cultural and social life, he was a member of the Columbia Rotary Club, the Columbia Cotillion Club, and the Tarantella Club. He also belonged to Forest Lake Club and the Pine Tree Hunt. Dr. Zemp was a member of Trinity Episcopal Church in Columbia.

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In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

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The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

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No two women are quite alike...





and no other oral contraceptive is quite like Ovulen-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

The progestin is distinctive, and for some women this may mean a different clinical response. The Compack® tablet dispenser is distinctive; its functional simplicity makes it virtually patient-proof. The acceptance of Ovulen-21 is distinctive... together with Ovulen®, it is more often prescribed than any other individual contraceptive product currently available.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see Detailed Product Information.

SEARLE Where "The Pill" Began
G. D. SEARLE & CO., P. O. Box 5110, Chicago, Illinois 60680

If you think the pink pill for U.R.I. symptoms is built for speed and endurance you're on the right track.

Here is a tablet that begins to relieve symptoms of upper respiratory infection quickly—a tablet that works for hours to make it easy for your patient to enjoy continuous relief.

Novahistine Singlet combines effective dosage of an antipyretic-analgesic with a vasoconstrictor-antihistamine formulation to relieve not only the congestion, but also the fever and the aches and pains that almost always accompany upper respiratory infections.

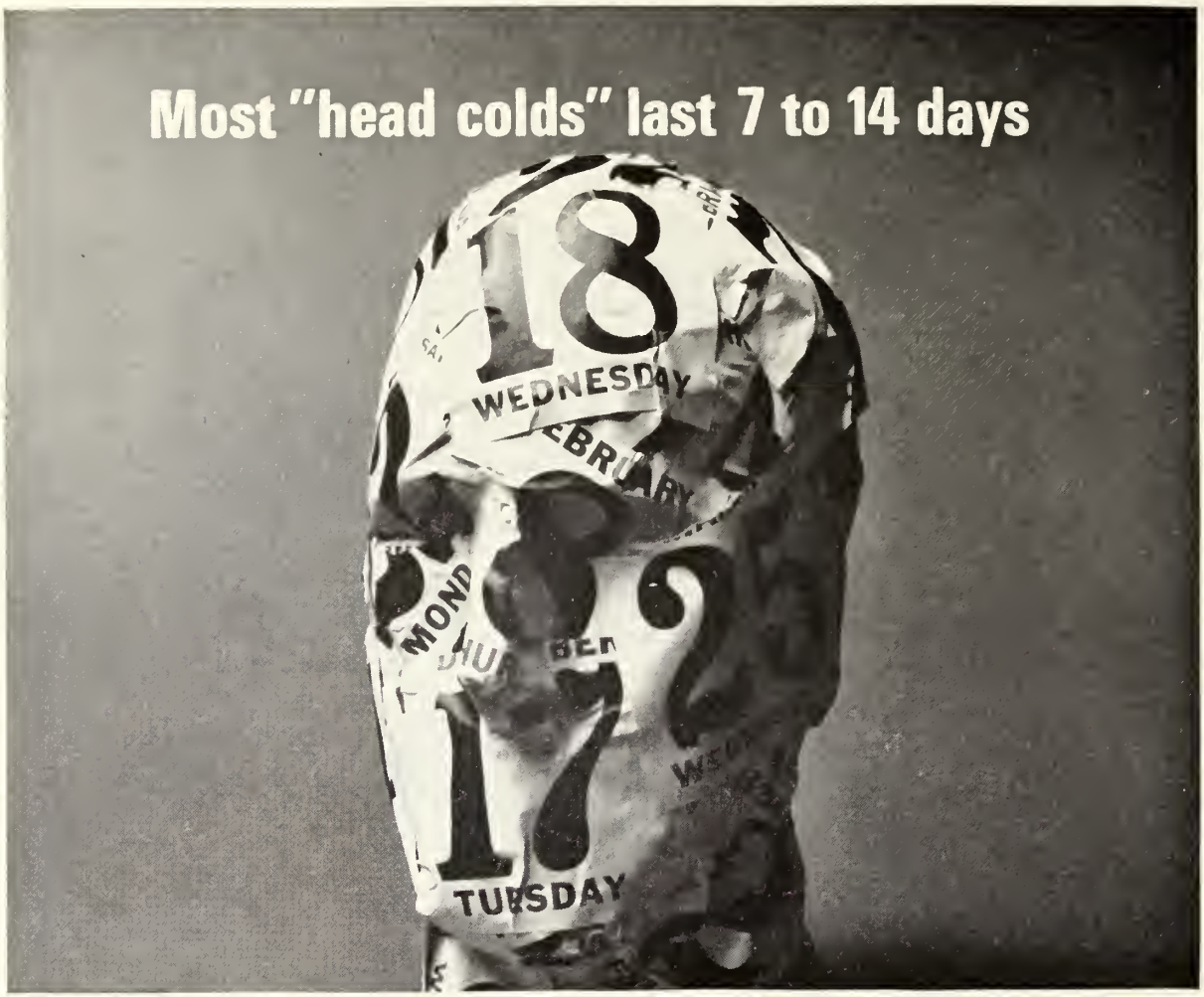
A total daily dosage of 3 or 4 tablets will normally provide the continuous relief your patient expects. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis, Indiana.

Novahistine®
Singlet decongestant-analgesic

(Each tablet contains: phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; acetaminophen, 500 mg.)

DOW



In the meantime...Ornade®

Prompt relief from nasal congestion and hypersecretion due to colds.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.
Contraindications: Glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction.
Precautions: Use cautiously in the presence of hypertension, hyperthyroidism, coronary artery disease, warn vehicle or machine operators of possible drowsiness.
Usage in Pregnancy: Use in pregnancy, nursing mothers and women who might bear children only when potential benefits have been weighed against possible hazards.
Note: The iodine in isopropamide iodide may alter PBI test results and will suppress I^{131} uptake; discontinue 'Ornade' one week before these tests.
Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth; nervousness; insomnia. Other known possible adverse reactions of the individual ingredients: nausea, vomiting, diarrhea, rash, dizziness, fatigue, tightness of chest, abdominal pain, irritability, tachycardia, headache, incoordination, tremor, difficulty in urination. Thrombocytopenia, leukopenia and convulsions have been reported.
Supplied: Bottles of 50 capsules.

One capsule q12h for round-the-clock relief

Ornade® Trademark Each capsule contains 8 mg. of Teldrin® (brand of chlorpheniramine maleate); 50 mg. of phenylpropanolamine hydrochloride, 2.5 mg. of isopropamide, as the iodide.
Spansule® capsules brand of sustained release capsules

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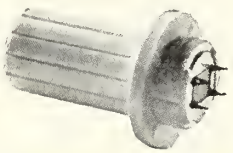
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Precautions—Nonspecific reactions are rare, but may occur. Vesiculation, ulceration or necrosis may occur at test site in highly sensitive persons. The test should be used with caution in patients known to be allergic to acacia, or to thimerosal (or other mercurial compounds).

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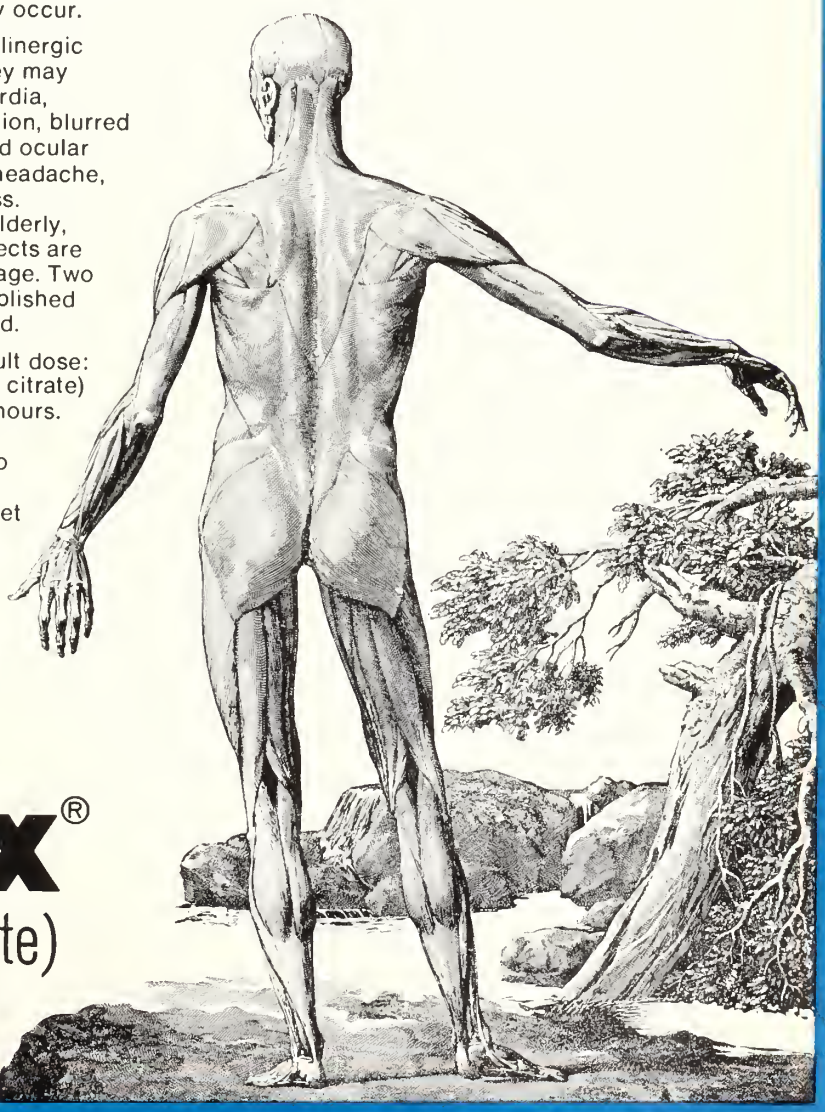
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
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Norflex®
(orphenadrine citrate)



..because psychic tension may not stop at night

The calming action of Valium (diazepam) helps counteract psychic tension and reduce overreaction to stresses during the day. Often the t.i.d. dosage schedule is enough to prevent build-up of tenseness that may interfere with sleep at night.

However, when psychic tension does contribute to sleeplessness, Valium can be especially useful. A tablet at bedtime, added to the daytime t.i.d. dosage, can help your patient be ready for bed *and* for sleep.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Valium®
(diazepam)

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